```
Welcome to STN International!  Enter x:x
LOGINID:ssspta1745sxt
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Dec 17  The CA Lexicon available in the CAPLUS and CA files
 NEWS  3  Feb 06  Engineering Information Encompass files have new names
 NEWS  4  Feb 16  TOXLINE no longer being updated
 NEWS  5  Apr 23  Search Derwent WPINDEX by chemical structure
 NEWS  6  Apr 23  PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
 NEWS  7  May 07  DGENE Reload
 NEWS  8  Jun 20  Published patent applications (A1) are now in USPATFULL
 NEWS  9  JUL 13  New SDI alert frequency now available in Derwent's
                  DWPI and DPCI
 NEWS 10  Aug 23  In-process records and more frequent updates now in
                  MEDLINE
 NEWS 11  Aug 23  PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
 NEWS 12  Aug 23  Adis Newsletters (ADISNEWS) now available on STN
 NEWS 13  Sep 17  IMSworld Pharmaceutical Company Directory name change
                  to PHARMASEARCH

 NEWS EXPRESS  August 15 CURRENT WINDOWS VERSION IS V6.0c,
               CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),
               AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

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  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *



FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001

=> ....Testing the current file.... screen

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Please change to a suitable file and repeat your upload

Some commands only work in certain files.  For example, the EXPAND
command can only be used to look at the index in a file which has an
index.  Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
```

commands which can be used in this file.

=> d l1

NO L# DEFINED

There are no L# queries, structures, or screen sets
defined in the current session.

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.15	0.15

FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 30 SEP 2001 HIGHEST RN 359625-43-7
DICTIONARY FILE UPDATES: 30 SEP 2001 HIGHEST RN 359625-43-7

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT
for details.

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=>
Uploading c:\stnexp4\queries\biphenyl.str

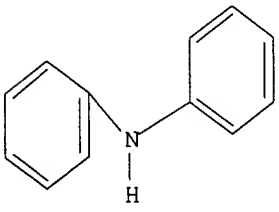
L1 STRUCTURE UPLOADED

=> que L1

L2 QUE L1

=> d l1

L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sam

SAMPLE SEARCH INITIATED 12:57:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9510 TO ITERATE

10.5% PROCESSED 1000 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

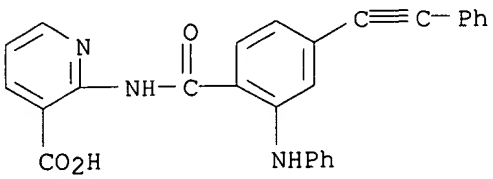
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 184366 TO 196034
PROJECTED ANSWERS: 52933 TO 59283

L3 50 SEA SSS SAM L1

=> d scan 1-10

'1-10' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 3-Pyridinecarboxylic acid, 2-[[2-(phenylamino)-4-(phenylethynyl)benzoyl]amino]- (9CI)
MF C27 H19 N3 O3



The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels
IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

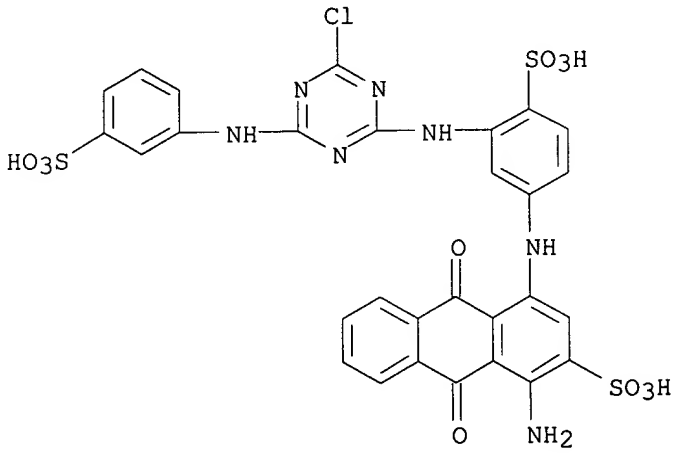
The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 2-Anthracenesulfonic acid, 1-amino-4-[[3-[[4-chloro-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino]-4-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, lithium sodium salt (9CI)
MF C29 H20 Cl N7 O11 S3 . x Li . x Na

PAGE 1-A

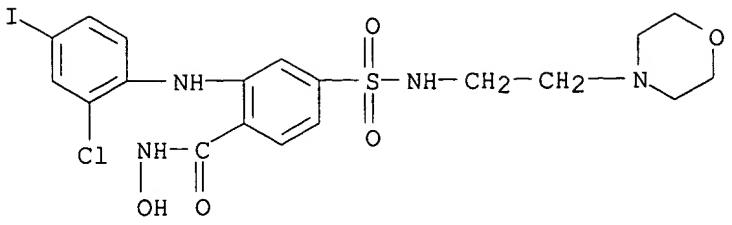


● x Li

PAGE 2-A

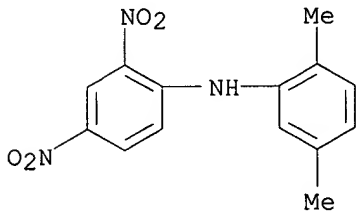
● x Na

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzamide, 2-[(2-chloro-4-iodophenyl)amino]-N-hydroxy-4-[[[2-(4-morpholinyl)ethyl]amino]sulfonyl]- (9CI)
MF C19 H22 Cl I N4 O5 S

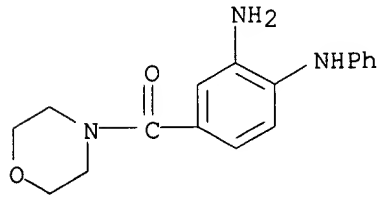


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenamine, N-(2,5-dimethylphenyl)-2,4-dinitro- (9CI)
MF C14 H13 N3 O4

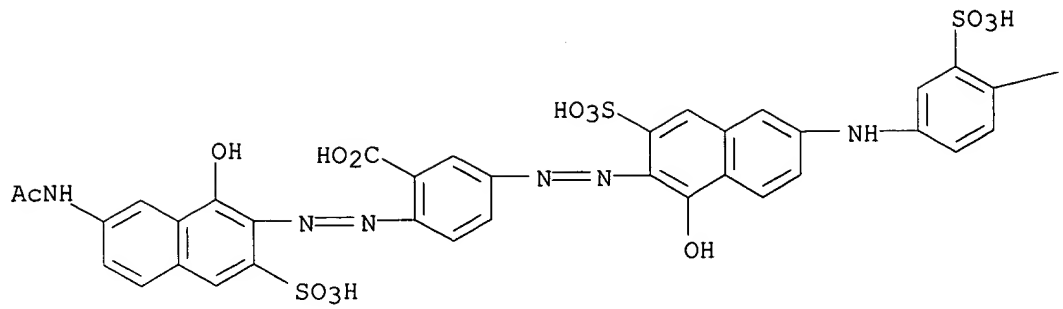


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Morpholine, 4-[3-amino-4-(phenylamino)benzoyl]- (9CI)
MF C17 H19 N3 O2

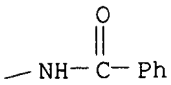


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzoic acid,
2-[[7-(acetylamino)-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-5-
[[6-[[4-(benzoylamino)-3-sulfophenyl]amino]-1-hydroxy-3-sulfo-2-
naphthalenyl]azo]- (9CI)
MF C42 H31 N7 O15 S3

PAGE 1-A

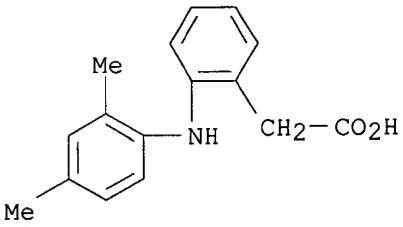


PAGE 1-B

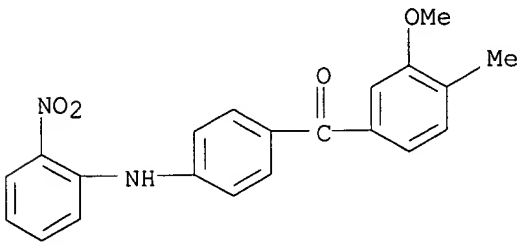


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzeneacetic acid, 2-[(2,4-dimethylphenyl)amino]- (9CI)
MF C16 H17 N O2

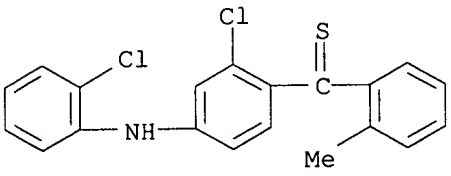


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Methanone, (3-methoxy-4-methylphenyl)[4-[(2-nitrophenyl)amino]phenyl]-
(9CI)
MF C21 H18 N2 O4

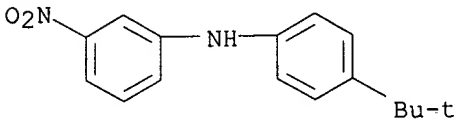


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Methanethione, [2-chloro-4-[(2-chlorophenyl)amino]phenyl](2-methylphenyl)- (9CI)
MF C20 H15 Cl2 N S

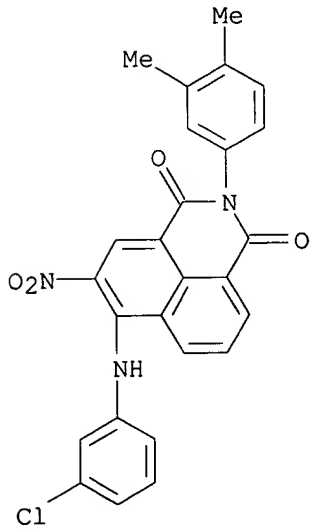


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenamine, N-[4-(1,1-dimethylethyl)phenyl]-3-nitro- (9CI)
MF C16 H18 N2 O2

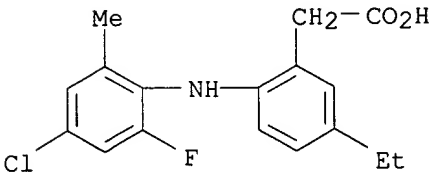


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 6-[(3-chlorophenyl)amino]-2-(3,4-dimethylphenyl)-5-nitro- (9CI)
MF C26 H18 Cl N3 O4

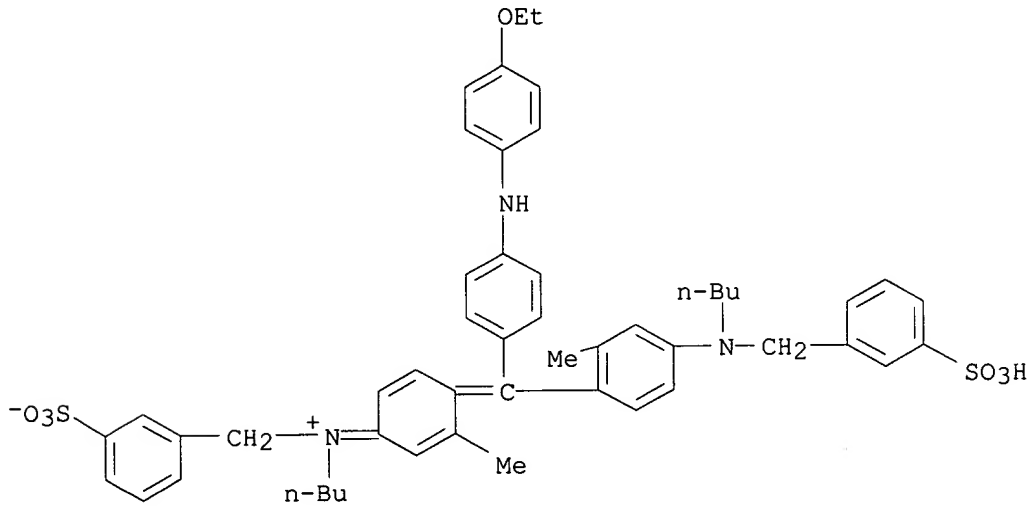


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzeneacetic acid, 2-[(4-chloro-2-fluoro-6-methylphenyl)amino]-5-ethyl- (9CI)
MF C17 H17 Cl F N O2

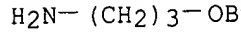


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenemethanaminium, N-butyl-N-[4-[[4-[butyl[(3-sulfophenyl)methyl]amino]-2-methylphenyl][4-[(4-ethoxyphenyl)amino]phenyl]methylene]-3-methyl-2,5-cyclohexadien-1-ylidene]-3-sulfo-, inner salt, compd. with 3-butoxy-1-propanamine (1:1) (9CI)
MF C51 H57 N3 O7 S2 . C7 H17 N O

CM 1



CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1 STRUCTURE UPLOADED
L2 QUE L1
L3 50 S L1 SAM

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.55	1.70

FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1947 - 1 Oct 2001 VOL 135 ISS 15
FILE LAST UPDATED: 30 Sep 2001 (20010930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

CAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.

=> s l1 and polymer?

REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 12:59:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 9510 TO ITERATE

10.5% PROCESSED 1000 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

```
FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       184366 TO   196034
PROJECTED ANSWERS:           52933 TO    59283

L4           50 SEA SSS SAM L1



L5           52 L4


       1372220 POLYMER?
         69521 POLYMD
         69521 POLYMD
                 (POLYMD)
         24767 POLYMG
        261007 POLYMN
          6153 POLYMNS
        261758 POLYMN
                 (POLYMN OR POLYMNS)
       1423063 POLYMER?
                 (POLYMER? OR POLYMD OR POLYMG OR POLYMN)
L6           4 L5 AND POLYMER?

=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1               STRUCTURE UPLOADED
L2               QUE L1
L3           50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                 S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4           50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5           52 S L4
L6            4 S L5 AND POLYMER?

=> d 1-4 ibib str ti ab

'STR' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
```

```
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, KWIC, and OCC) may be used with DISPLAY ACC to view a
specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end


=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1             STRUCTURE UPLOADED
L2             QUE L1
L3          50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
             S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4          50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5          52 S L4
L6           4 S L5 AND POLYMER?

=> d 1-4 ibib abs str

'STR' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:
```

```
ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, KWIC, and OCC) may be used with DISPLAY ACC to view a
specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end


=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1              STRUCTURE UPLOADED
L2              QUE L1
L3           50 S L1 SAM
```

FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
S L1 AND POLYMER?

FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4 50 S L1

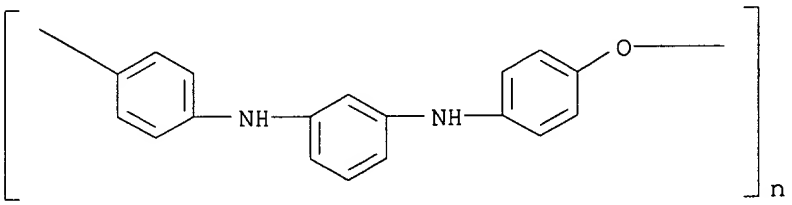
FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5 52 S L4
L6 4 S L5 AND POLYMER?

=> 1-4 ibib ti hitstr abs

1-4 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d 1-4 ibib ti hitstr abs

L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:832137 CAPLUS
DOCUMENT NUMBER: 134:71951
TITLE: Preparation of meta-polyaniline and its related poly(iminoarylene)s by nickel-catalyzed polycondensation of aryl dichlorides with aryl primary diamines
AUTHOR(S): Kanbara, Takaki; Miyazaki, Yuko; Hasegawa, Kiyoshi; Yamamoto, Takakazu
CORPORATE SOURCE: Chemical Resources Laboratory, Tokyo Institute of Technology, Yokohama, 226-8503, Japan
SOURCE: J. Polym. Sci., Part A: Polym. Chem. (2000), 38(23), 4194-4199
CODEN: JPACEC; ISSN: 0887-624X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Preparation of meta-polyaniline and its related poly(iminoarylene)s by nickel-catalyzed polycondensation of aryl dichlorides with aryl primary diamines
IT **221685-68-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of meta-polyaniline and its related poly(iminoarylene)s by nickel-catalyzed polycondensation of aryl dichlorides with aryl primary diamines)
RN 221685-68-3 CAPLUS
CN Poly(oxy-1,4-phenyleneimino-1,3-phenyleneimino-1,4-phenylene) (9CI) (CA INDEX NAME)



AB The catalyst system generated from com. available bis(1,5-cyclooctadiene)nickel(0) and 1,1'-bis(diphenylphosphino)ferrocene is shown

to be effective in **polymn.** of aryl dichlorides with aryl primary diamines. The system was also used for prepn. of m-polyaniline from m-dichlorobenzene and m-phenylenediamine. The **polymers** obtained were characterized with respect to their structure, polydispersity, and soly. in org. solvents.

REFERENCE COUNT: 31

REFERENCE(S):
(1) Bei, X; Tetrahedron Lett 1999, V40, P1237 CAPLUS
(2) Beletskaya, I; Synlett 1999, P1459 CAPLUS
(3) Brenner, E; Tetrahedron 1999, V55, P12829 CAPLUS
(4) Brenner, E; Tetrahedron Lett 1998, V39, P5359 CAPLUS
(6) Desmarets, C; Tetrahedron Lett 2000, V41, P2875 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:594182 CAPLUS
DOCUMENT NUMBER: 133:310209
TITLE: Synthesis and characterization of **polymers** with oligoaniline side chains
AUTHOR(S): Benicewicz, Brian C.; Chen, Ru
CORPORATE SOURCE: Department of Chemistry Rensselaer Polytechnic Institute, New York State Center for Polymer Synthesis, Troy, NY, 12180, USA
SOURCE: Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (2000), 41(2), 1733-1734
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

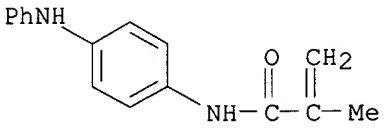
TI Synthesis and characterization of **polymers** with oligoaniline side chains

IT **301816-95-5P**, N-(4-Anilinophenyl)methacrylamide homopolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of monomers and radical **polymn.** to obtain (meth)acrylic **polymers** with oligoaniline side chains)

RN 301816-95-5 CAPLUS
CN 2-Propenamide, 2-methyl-N-[4-(phenylamino)phenyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 41543-92-4
CMF C16 H16 N2 O



AB (meth)acrylamide and (meth)acrylate monomers contg. oligoaniline side chain units were prepd. by a modified Ullman condensation reaction to prep. the arylamine side groups with Cu as reactant and catalyst or by Pd catalyzed amination of aryl halides and triflates. The monomers prepd. are N-(4-anilinophenyl)methacrylamide (M1), N-[4-(N'-acetyl-N'-phenyl)amino]phenyl methacrylamide (M2), and (M4); other monomers were also prepd. by the method of D. Braun and S. Hauge (1971). Free radical **polymn.** using AIBN initiator of these monomers produces **polymers** with oligoanilines incorporated into the **polymer** as side chains with control of the side chain length and content of

electroactive species. The soly. of the **polymers** is dependent on the extent of acetyl substitution, the inherent viscosity is 0.1 to 0.3 dL/g, and. The glass transition temp. of the homo-poly(methacrylamide)s is 183, 220, and 207.degree., for M1, M2, and M4, resp.

REFERENCE COUNT: 15

REFERENCE(S):
(1) Braun, D; Makromol Chem 1971, V150, P57 CAPLUS
(2) Cohen, J; US 5135682 1992 CAPLUS
(4) Hartwig, J; Angew Chem Int Ed 1998, V37, P2046 CAPLUS
(7) Lucarini, M; J Am Chem Soc 1999, V121, P11546 CAPLUS
(8) Parker, D; Rubber Chem Technol 1989, V62, P732 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:143013 CAPLUS
DOCUMENT NUMBER: 130:252746

TITLE: Preparation of soluble poly(iminoarylene)s by palladium-catalyzed polycondensation of aryl dibromides with aryl primary diamines

AUTHOR(S): Kanbara, Takaki; Nakadani, Yoshiko; Hasegawa, Kiyoshi
CORPORATE SOURCE: Department of Chemical and Biochemical Engineering, Faculty of Engineering, Toyama University, Toyama, 930-8555, Japan

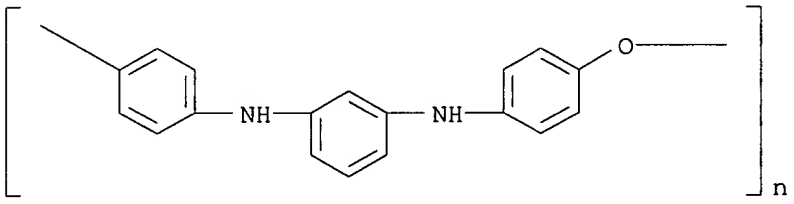
SOURCE: Polym. J. (Tokyo) (1999), 31(2), 206-209
CODEN: POLJB8; ISSN: 0032-3896
PUBLISHER: Society of Polymer Science, Japan
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Preparation of soluble poly(iminoarylene)s by palladium-catalyzed polycondensation of aryl dibromides with aryl primary diamines

IT **221685-68-3P**, 1,3-Dibromobenzene-4,4'-oxydianiline copolymer, SRU
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of arom. polyamines in presence of palladium catalyst)

RN 221685-68-3 CAPLUS

CN Poly(oxy-1,4-phenyleneimino-1,3-phenyleneimino-1,4-phenylene) (9CI) (CA INDEX NAME)



AB A catalyst based on tris(dibenzylideneacetone)dipalladium and 2,2'-bis(diphenylphosphino)-1,1'-binaphthyl was used for the polycondensation of m-phenylene dibromide, 4,4'-dibromodiphenyl oxide, 2,6-dibromopyridine, or 3,5-dibromopyridine , with arom. or heterocyclic diamines to give arom. polyamines.

REFERENCE COUNT: 31

REFERENCE(S):
(1) Driver, M; J Am Chem Soc 1997, V119, P8232 CAPLUS
(2) Goodson, F; Macromolecules 1998, V31, P1700 CAPLUS
(3) Goto, H; Synth Met 1997, V85, P1683 CAPLUS
(4) Guram, A; Angew Chem Int Ed Engl 1995, V34, P1348 CAPLUS
(5) Hartwig, J; J Am Chem Soc 1996, V118, P3626 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

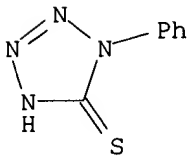
L6 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:735408 CAPLUS
DOCUMENT NUMBER: 130:45210
TITLE: Silver halide photographic material using gelatin-compatible **polymer** as high contrast-promoting agent
INVENTOR(S): Furukawa, Akira; Mitsui, Shinobu
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10301220	A2	19981113	JP 1997-104844	19970422

TI Silver halide photographic material using gelatin-compatible **polymer** as high contrast-promoting agent
IT **216964-98-6P**
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photog. film contg. gelatin-compatible **polymer** as high contrast promoting agent)
RN 216964-98-6 CAPLUS
CN Acetic acid, [[3-(diethylamino)propyl]amino]oxo-, 2-[4-[(4-ethenylphenyl)amino]phenyl]hydrazide, telomer with 1,2-dihydro-1-phenyl-5H-tetrazole-5-thione (9CI) (CA INDEX NAME)

CM 1

CRN 86-93-1
CMF C7 H6 N4 S

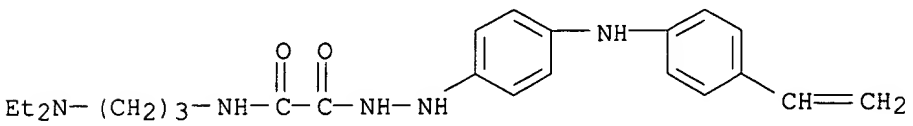


CM 2

CRN 216964-97-5
CMF (C23 H31 N5 O2)x
CCI PMS

CM 3

CRN 216964-96-4
CMF C23 H31 N5 O2



AB The title material contains a **polymer** having a functional group selected from SX (X = N-contg. heterocyclic group) and SC(:S)NR1R2 (R1, R2 = alkyl which may form a ring) which links to its termini in .gtoreq.1 of the constitutive layers. The **polymer** shows high compatibility with gelatin and has no influence on the photog. properties, and the material shows good storage stability, high sensitivity, and high contrast.

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	18.96	21.30

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.35	-2.35

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:01:02 ON 01 OCT 2001
Connection closed by remote host

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:ssspta1745sxt
PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:08:21 ON 01 OCT 2001
FILE 'CAPLUS' ENTERED AT 13:08:21 ON 01 OCT 2001
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	18.96	21.30

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.35	-2.35

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(FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1 STRUCTURE UPLOADED
L2 QUE L1
L3 50 S L1 SAM

FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
S L1 AND POLYMER?

FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4 50 S L1

FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5 52 S L4
L6 4 S L5 AND POLYMER?

=> s l1 and poly?

REG1stRY INITIATED

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Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.



SAMPLE SEARCH INITIATED 13:08:42 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   9510 TO ITERATE

 10.5% PROCESSED    1000 ITERATIONS                                 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       184366 TO   196034
PROJECTED ANSWERS:           52933 TO    59283

L7            50 SEA SSS SAM L1



L8           52 L7


       2909891 POLY?
L9           10 L8 AND POLY?

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     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1                STRUCTURE UPLOADED
L2                QUE L1
L3            50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                  S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4            50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5            52 S L4
L6             4 S L5 AND POLYMER?
                  S L1 AND POLY?

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L7            50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8            52 S L7
L9            10 S L8 AND POLY?

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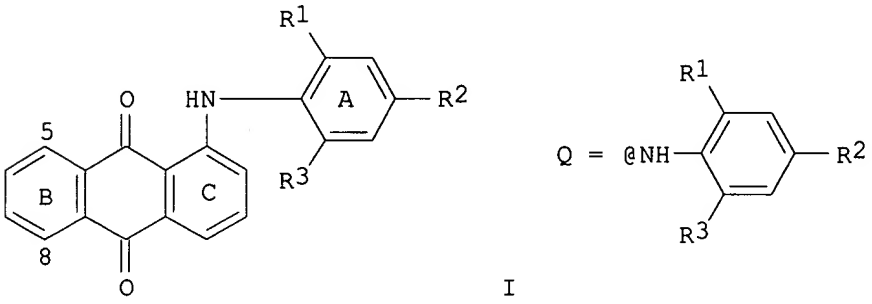
L9   ANSWER 1 OF 10  CAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:         2001:499721  CAPLUS
DOCUMENT NUMBER:          135:93918
TITLE:                    Novel anthraquinone pigments, their manufacture,
                          coloration of synthetic materials by kneading with
the
```

pigments, and the colored synthetic materials
INVENTOR(S): Adan, Jan Marie
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding, Inc., Switz.
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001187844	A2	20010710	JP 2000-391886	20001225
EP 1127922	A1	20010829	EP 2000-811214	20001220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2001020432	A1	20010913	US 2000-749014	20001227
CN 1309151	A	20010822	CN 2000-137542	20001228

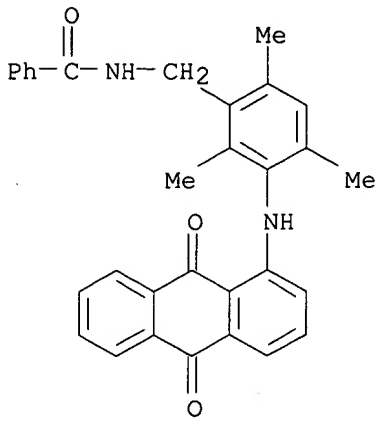
PRIORITY APPLN. INFO.: EP 1999-811217 A 19991229
OTHER SOURCE(S): MARPAT 135:93918
TI Novel anthraquinone pigments, their manufacture, coloration of synthetic materials by kneading with the pigments, and the colored synthetic materials
GI



I

AB The color pigments I [R1 = C1-6 alkyl, C1-6 alkoxy, phenoxy, halo; R2 = H, C1-6 alkyl, C1-6 alkoxy, phenoxy, halo, acylamino, CH2NH-acyl, phthalimidomethyl; R3 = C1-6 alkyl, C1-6 alkoxy, phenoxy, halo; Ring A may be substituted with SO3-M+ (M+ = cation); Rings B and C may be substituted with halo, OH, SH, amino, C1-6 alkylamino, C1-6 alkyl, C1-6 alkoxy, phenoxy, acylamino, C1-6 thioalkyl, or thiophenyl; Ring B may be substituted with Q at 5- or 8-positions] are manufd. by reaction of 1-chloro-, 1-nitro-, or 1-sulfoanthraquinone with 1 equiv of 2,4,6-trialkylanilines or reaction of 1,5- or 1,8-dichloro-, 1,5- or 1,8-dinitro-, or 1,5- or 1,8-disulfoanthraquinone with 2 equiv of 2,4,6-trialkylanilines in the presence of alkali acetate, Cu, and/or Cu salts and optionally org. solvents.. Thus, condensation of 1-chloroanthraquinone with mesidine in the presence of Ca(OAc)2, Cu, and CuCl gave a coloring agent, which was kneaded with **polyamide** 6 granules to give colored granules showing good light fastness.
IT **348574-75-4P**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
(manuf. of anthraquinone pigments for coloration of synthetic resins)
RN 348574-75-4 CAPLUS

CN Benzamide, N-[[3-[(9,10-dihydro-9,10-dioxo-1-anthracenyl)amino]-2,4,6-trimethylphenyl]methyl]- (9CI) (CA INDEX NAME)

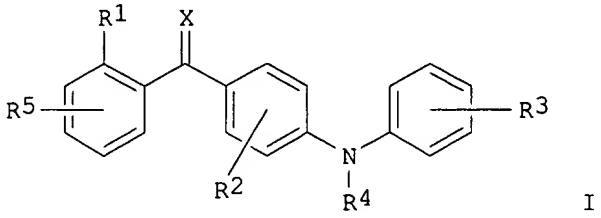


L9 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:435023 CAPLUS
DOCUMENT NUMBER: 135:45992
TITLE: Aminobenzophenones as inhibitors of IL-1.beta. and TNF-.alpha.
INVENTOR(S): Ottosen, Erik Rytter
PATENT ASSIGNEE(S): Leo Pharmaceutical Products Ltd. A/s (Lovens Kemiske Fabrik Produktionsaktieselskab), Den.
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001042189	A1	20010614	WO 2000-DK653	20001129

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-169333 P 19991206
OTHER SOURCE(S): MARPAT 135:45992
TI Aminobenzophenones as inhibitors of IL-1.beta. and TNF-.alpha.
GI



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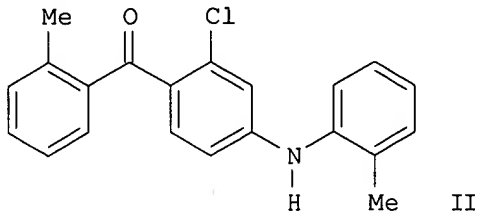


II

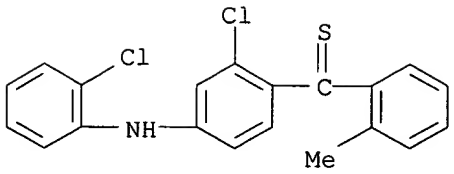
AB Title compds. I are disclosed [wherein: R1 = halo, OH, SH, CF3, amino, (C1-3)alkyl, (C2-3)olefinic, (C1-3)alkoxy, (C1-3)alkylthio, (C1-6)alkylamino, (C1-3)alkoxycarbonyl, cyano, CONH2, Ph, and NO2; R2 = one or more of H, halo, OH, SH, CF3, amino, (C1-3)alkyl, (C2-3)olefinic, (C1-3)alkoxy, (C1-3)alkylthio, (C1-6)alkylamino, (C1-3)alkoxycarbonyl, cyano, CONH2, Ph, and NO2; R3 = one or more of H, halo, OH, SH, CF3, cyano, CO2H, carbamoyl, (C1-10)alkyl, (C2-10)olefinic, (C3-8)monocyclic hydrocarbon, (C1-10)alkoxy, (C1-10)alkylthio, (C1-10)alkoxycarbonyl, and Ph; R4 = H, (C1-6)alkyl, (C2-6)olefinic, or (C3-6)monocyclic hydrocarbon; R5 = one or more of H and R1; X = O, S, or N-OH; and salts thereof with pharmaceutically acceptable acids, hydrates and solvates; with 9 specific exclusions]. The compds. are cytokine inhibitors, and may be used in the prophylaxis or treatment of a variety of inflammatory and other diseases. They may be administered in combination with a variety of other drugs and drug classes. Examples include prepns. of 46 I [X = O] and 18 precursors.

Claims cover these compds. I and the analogous I [X = S, N-OH]. For instance, 2-bromotoluene was lithiated, converted to an organozinc compd., and coupled with 2-chloro-4-nitrobenzoyl chloride under Pd(0) catalysis to give 2-chloro-2'-methyl-4-nitrobenzophenone. This was reduced with SnCl2 in EtOH to give the amine, which was coupled with 2-bromotoluene in the presence of NaOBu-t, Pd2(dba)3, and BINAP, to give title compd. II. This compd. inhibited IL-1.beta., TNF-.alpha., and PMN-superoxide prodn. with IC50 values of 13, 4.0, and 6.3 nM, resp.

IT **344458-32-8P**, 2-Chloro-4-(2-chlorophenylamino)-2'-methyl(thiobenzophenone)
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of aminobenzophenones as inhibitors of IL-1.beta. and TNF-.alpha.)

RN 344458-32-8 CAPLUS

CN Methanethione, [2-chloro-4-[(2-chlorophenyl)amino]phenyl](2-methylphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1
REFERENCE(S): (1) Leo Pharmaceutical Products Ltd AS; WO 9832730 A1 1998 CAPLUS

L9 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:63959 CAPLUS
DOCUMENT NUMBER: 134:115755
TITLE: Preparation of aminobenzophenones as inhibitors of IL-1.beta. and TNF-.alpha.
INVENTOR(S): Ottosen, Erik Rytter; Dannacher, Heinz Wilhelm
PATENT ASSIGNEE(S): Leo Pharmaceutical Products Ltd. A/S (Lovens Kemiske Fabrik Produktionsaktie, Den.
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001005749	A1	20010125	WO 2000-DK386	20000711

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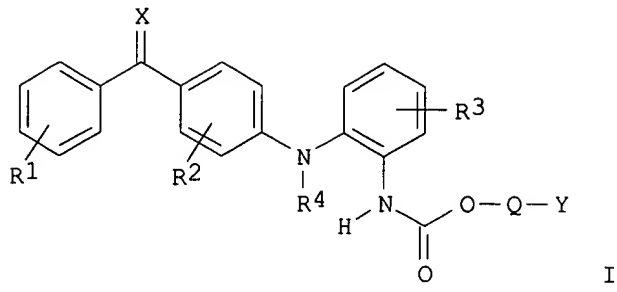
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-144063 P 19990716
OTHER SOURCE(S): MARPAT 134:115755
TI Preparation of aminobenzophenones as inhibitors of IL-1.beta. and TNF-.alpha.
GI



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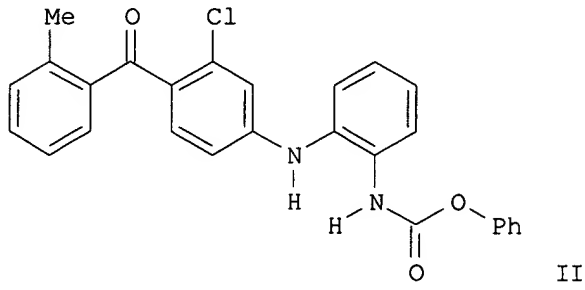


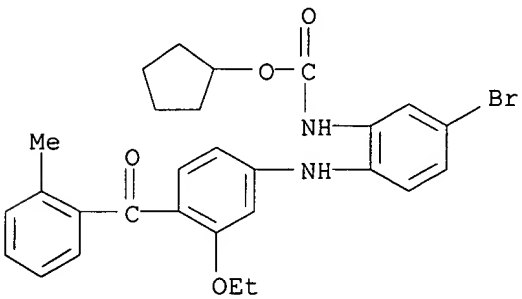
II

AB The title compds. [I; R1-R3 = H, halo, OH, etc.; R4 = H, alkyl, allyl; Q =
a bond, CR6R7OCO (wherein R6, R7 = H, CF3, alkyl); Y = alkyl, alkenyl, cycloalkyl, etc.; X = O, S] which are able to inhibit the prodn. of IL-1.beta., TNF-.alpha. and PMN-superoxide prodn., were prepd. and formulated. Thus, reacting 4-(2-aminophenylamino)-2-chloro-2'-methylbenzophenone with Ph chloroformate in the presence of N-Et diisopropylamine in CH2Cl2 afforded II which showed IC50 of 50 nM and of 10 nM against IL-1.beta. and TNF.alpha. prodn., resp.

IT **321359-11-9P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of aminobenzophenones as inhibitors of IL-1.beta. and TNF-.alpha.)

RN 321359-11-9 CAPLUS

CN Carbamic acid, [5-bromo-2-[[3-ethoxy-4-(2-methylbenzoyl)phenyl]amino]phenyl]-, cyclopentyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1
REFERENCE(S): (1) Leo Pharmaceutical Products Ltd AS; WO 9832730 A1 1998 CAPLUS

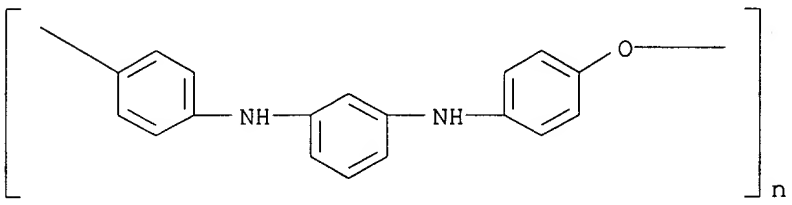
L9 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:832137 CAPLUS
DOCUMENT NUMBER: 134:71951
TITLE: Preparation of meta-**polyaniline** and its related **poly**(iminoarylene)s by nickel-catalyzed **polycondensation** of aryl dichlorides with aryl primary diamines
AUTHOR(S): Kanbara, Takaki; Miyazaki, Yuko; Hasegawa, Kiyoshi; Yamamoto, Takakazu
CORPORATE SOURCE: Chemical Resources Laboratory, Tokyo Institute of Technology, Yokohama, 226-8503, Japan
SOURCE: J. Polym. Sci., Part A: Polym. Chem. (2000), 38(23), 4194-4199
CODEN: JPACEC; ISSN: 0887-624X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Preparation of meta-**polyaniline** and its related **poly**(iminoarylene)s by nickel-catalyzed **polycondensation** of aryl dichlorides with aryl primary diamines

AB The catalyst system generated from com. available bis(1,5-cyclooctadiene)nickel(0) and 1,1'-bis(diphenylphosphino)ferrocene is shown to be effective in **polymn.** of aryl dichlorides with aryl primary diamines. The system was also used for prepn. of m-**polyaniline** from m-dichlorobenzene and m-phenylenediamine. The **polymers** obtained were characterized with respect to their structure, **polydispersity**, and soly. in org. solvents.

IT **221685-68-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of meta-**polyaniline** and its related **poly**(iminoarylene)s by nickel-catalyzed **polycondensation** of aryl dichlorides with aryl primary diamines)

RN 221685-68-3 CAPLUS
CN Poly(oxy-1,4-phenyleneimino-1,3-phenyleneimino-1,4-phenylene) (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31
REFERENCE(S):
(1) Bei, X; Tetrahedron Lett 1999, V40, P1237 CAPLUS
(2) Beletskaya, I; Synlett 1999, P1459 CAPLUS
(3) Brenner, E; Tetrahedron 1999, V55, P12829 CAPLUS
(4) Brenner, E; Tetrahedron Lett 1998, V39, P5359 CAPLUS
(6) Desmarets, C; Tetrahedron Lett 2000, V41, P2875 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:594182 CAPLUS
DOCUMENT NUMBER: 133:310209
TITLE: Synthesis and characterization of **polymers** with oligoaniline side chains
AUTHOR(S): Benicewicz, Brian C.; Chen, Ru
CORPORATE SOURCE: Department of Chemistry Rensselaer Polytechnic Institute, New York State Center for Polymer

Synthesis, Troy, NY, 12180, USA
SOURCE: Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (2000), 41(2), 1733-1734
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Synthesis and characterization of **polymers** with oligoaniline side chains

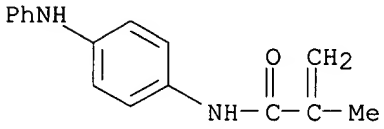
AB (meth)acrylamide and (meth)acrylate monomers contg. oligoaniline side chain units were prepd. by a modified Ullman condensation reaction to prep. the arylamine side groups with Cu as reactant and catalyst or by Pd catalyzed amination of aryl halides and triflates. The monomers prepd. are N-(4-anilinophenyl)methacrylamide (M1), N-[4-(N'-acetyl-N'-phenyl)amino]phenyl methacrylamide (M2), and (M4); other monomers were also prepd. by the method of D. Braun and S. Hauge (1971). Free radical **polymn**. using AIBN initiator of these monomers produces **polymers** with oligoanilines incorporated into the **polymer** as side chains with control of the side chain length and content of electroactive species. The soly. of the **polymers** is dependent on the extent of acetyl substitution, the inherent viscosity is 0.1 to 0.3 dL/g, and. The glass transition temp. of the homo-**poly**(methacrylamide)s is 183, 220, and 207.degree., for M1, M2, and M4, resp.

IT **301816-95-5P**, N-(4-Anilinophenyl)methacrylamide homopolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of monomers and radical **polymn**. to obtain (meth)acrylic **polymers** with oligoaniline side chains)

RN 301816-95-5 CAPLUS
CN 2-Propenamide, 2-methyl-N-[4-(phenylamino)phenyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 41543-92-4
CMF C16 H16 N2 O



REFERENCE COUNT: 15
REFERENCE(S):
(1) Braun, D; Makromol Chem 1971, V150, P57 CAPLUS
(2) Cohen, J; US 5135682 1992 CAPLUS
(4) Hartwig, J; Angew Chem Int Ed 1998, V37, P2046 CAPLUS
(7) Lucarini, M; J Am Chem Soc 1999, V121, P11546 CAPLUS
(8) Parker, D; Rubber Chem Technol 1989, V62, P732 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:143013 CAPLUS
DOCUMENT NUMBER: 130:252746
TITLE: Preparation of soluble **poly**(iminoarylene)s by palladium-catalyzed **polycondensation** of aryl dibromides with aryl primary diamines
AUTHOR(S): Kanbara, Takaki; Nakadani, Yoshiko; Hasegawa, Kiyoshi

CORPORATE SOURCE: Department of Chemical and Biochemical Engineering, Faculty of Engineering, Toyama University, Toyama, 930-8555, Japan
SOURCE: Polym. J. (Tokyo) (1999), 31(2), 206-209
CODEN: POLJB8; ISSN: 0032-3896
PUBLISHER: Society of Polymer Science, Japan
DOCUMENT TYPE: Journal
LANGUAGE: English

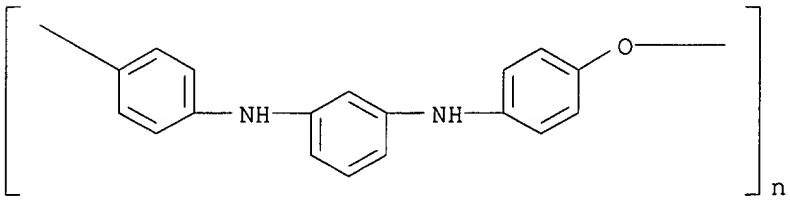
TI Preparation of soluble **poly**(iminoarylene)s by palladium-catalyzed **polycondensation** of aryl dibromides with aryl primary diamines

AB A catalyst based on tris(dibenzylideneacetone)dipalladium and 2,2'-bis(diphenylphosphino)-1,1'-binaphthyl was used for the **polycondensation** of m-phenylene dibromide, 4,4'-dibromodiphenyl oxide, 2,6-dibromopyridine, or 3,5-dibromopyridine , with arom. or heterocyclic diamines to give arom. **polyamines.**

IT **221685-68-3P**, 1,3-Dibromobenzene-4,4'-oxydianiline copolymer, SRU
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of arom. **polyamines** in presence of palladium catalyst)

RN 221685-68-3 CAPLUS

CN Poly(oxy-1,4-phenyleneimino-1,3-phenyleneimino-1,4-phenylene) (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31
REFERENCE(S):
(1) Driver, M; J Am Chem Soc 1997, V119, P8232 CAPLUS
(2) Goodson, F; Macromolecules 1998, V31, P1700 CAPLUS
(3) Goto, H; Synth Met 1997, V85, P1683 CAPLUS
(4) Guram, A; Angew Chem Int Ed Engl 1995, V34, P1348 CAPLUS
(5) Hartwig, J; J Am Chem Soc 1996, V118, P3626 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:735408 CAPLUS
DOCUMENT NUMBER: 130:45210
TITLE: Silver halide photographic material using gelatin-compatible **polymer** as high contrast-promoting agent
INVENTOR(S): Furukawa, Akira; Mitsui, Shinobu
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10301220	A2	19981113	JP 1997-104844	19970422

TI Silver halide photographic material using gelatin-compatible **polymer** as high contrast-promoting agent

AB The title material contains a **polymer** having a functional group selected from SX (X = N-contg. heterocyclic group) and SC(:S)NR1R2 (R1, R2 = alkyl which may form a ring) which links to its termini in .gtoreq.1 of the constitutive layers. The **polymer** shows high compatibility with gelatin and has no influence on the photog. properties, and the material shows good storage stability, high sensitivity, and high contrast.

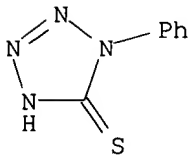
IT **216964-98-6P**
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photog. film contg. gelatin-compatible **polymer** as high contrast promoting agent)

RN 216964-98-6 CAPLUS

CN Acetic acid, [[3-(diethylamino)propyl]amino]oxo-, 2-[4-[(4-ethenylphenyl)amino]phenyl]hydrazide, telomer with 1,2-dihydro-1-phenyl-5H-tetrazole-5-thione (9CI) (CA INDEX NAME)

CM 1

CRN 86-93-1
CMF C7 H6 N4 S

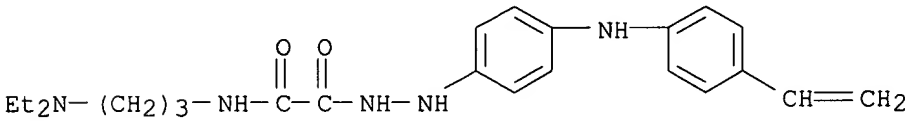


CM 2

CRN 216964-97-5
CMF (C23 H31 N5 O2)x
CCI PMS

CM 3

CRN 216964-96-4
CMF C23 H31 N5 O2



L9 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:527309 CAPLUS
DOCUMENT NUMBER: 129:148822
TITLE: Preparation and formulation of aminobenzophenones as inhibitors of interleukin and TNF
INVENTOR(S): Ottosen, Erik Rytter; Rachlin, Schneur
PATENT ASSIGNEE(S): Leo Pharmaceutical Products Ltd. A/S (Lovens Kemiske Fabrik Produktionsaktie, Den.
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

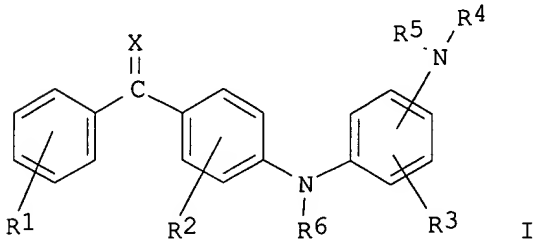
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832730	A1	19980730	WO 1998-DK8	19980108
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9854781	A1	19980818	AU 1998-54781	19980108
AU 733561	B2	20010517		
EP 966424	A1	19991229	EP 1998-900270	19980108
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001511771	T2	20010814	JP 1998-531499	19980108

PRIORITY APPLN. INFO.: GB 1997-1453 A 19970124
WO 1998-DK8 W 19980108

OTHER SOURCE(S): MARPAT 129:148822

TI Preparation and formulation of aminobenzophenones as inhibitors of interleukin and TNF

GI



I

AB The title compds. I [R1 and R2 stand independently for one or more, similar or different substituents selected from the group consisting of hydrogen, halogen, hydroxy, mercapto, trifluoromethyl, amino, alkyl, alkoxy, alkylthio, alkylamino, or alkoxycarbonyl, the C-content of which can be from 1 to 5, cyano, carboxy, carbamoyl, Ph, or nitro; R3 stands for hydrogen, halogen, hydroxy, mercapto, trifluoromethyl, amino, alkyl, alkoxy, alkylthio, alkylamino, or alkoxycarbonyl, the C-content of which can be from 1 to 5, Ph, cyano, carboxy, or carbamoyl; R4, R5 and R6 stand independently for hydrogen, trifluoromethyl, alkyl, carbamoyl, alkoxycarbonyl, or alkyloxo, the C-content of which can be from 1 to 5; X stands for oxygen, NOH, NO-alkyl, dialkoxy, cyclic dialkoxy, dialkylthio, or cyclic dialkylthio, the C-content of which can be from 1 to 5] are prepd. The present compds. are of value in the human and veterinary practice as systemic and topical therapeutic agents for the treatment and prophylaxis of asthma, allergy, rheumatoid arthritis, spondyloarthritis, gout, atherosclerosis, chronic inflammatory bowel disease, proliferative and inflammatory skin disorders, such as psoriasis, and atopic dermatitis.

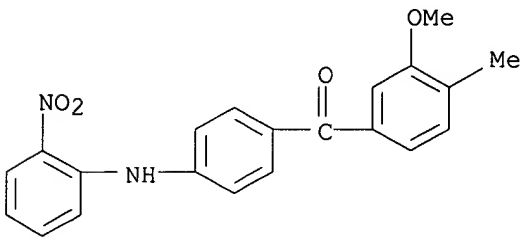
In an in vitro test using human **polymorphonuclear** granulocytes, 4-(2-aminophenylamino)-2-chloro-2'-methylbenzophenone in vitro showed IC50 of 13 nM and 7.1 nM against the prodn. of Il-1.beta. and TNF-.alpha., resp. In the above test, 4-(2-aminophenylamino)benzophenone (II) in vitro

showed IC50 of 250 nM and 790 nM against the prodn. of Il-1.beta. and TNF-.alpha., resp. In the 12-O-tetradecanoylphorbol-13-acetate induced murine skin inflammation model, II showed activity equal to hydrocortisone.

IT **210966-89-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of aminobenzophenones as inhibitors of interleukin and TNF)

RN 210966-89-5 CAPLUS

CN Methanone, (3-methoxy-4-methylphenyl)[4-[(2-nitrophenyl)amino]phenyl]-(9CI) (CA INDEX NAME)



L9 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:464194 CAPLUS
DOCUMENT NUMBER: 129:203263
TITLE: Colored peptides: synthesis, properties and use in preparation of peptide sub-library kits
AUTHOR(S): Sebestyen, Ferenc; Szendrei, Gyorgyi; Mak, Marianna; Doda, Margit; Illyes, Eszter; Szokan, Gyula; Kindla, Krisztina; Rapp, Wolfgang; Szego, Peter; Campian, Eugen; Furka, Arpad
CORPORATE SOURCE: Department of Organic Chemistry, Eotvos Lorand University, Budapest, H-1518/112, Hung.
SOURCE: J. Pept. Sci. (1998), 4(4), 294-299
CODEN: JPSIEI; ISSN: 1075-2617
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Colored peptides: synthesis, properties and use in preparation of peptide sub-library kits

AB Several methods were developed for the solid-phase synthesis (SPPS) of colored peptides and peptide libraries. At first a bifunctional red compd., 4-(4-(N-ethyl-N-(3-(tert-butoxycarbonyl)aminopropyl)amino)phenylazo)benzoic acid (Boc-EPAB), was coupled with chloromethyl resin to obtain a new solid support suitable for SPPS using tert-butoxycarbonyl (Boc) chem. Peptides synthesized on this colored resin had the chromophore at their C-termini. N-terminally colored peptides were synthesized on a traditional solid support, coupled with chromophoric carboxylic acid before cleavage. A model pentapeptide, Phe-Ala-Val-Leu-Gly, and its ten derivs. were synthesized and their properties studied. It was found that the presence of chromophores decreases the water soly. of peptides. However, insertion of solubilizing tags (penta-lysine sequences or **polyoxyethyl** chains) into the mol. of any colored deriv. resulted in enhancement of the soly. The RP-HPLC hydrophobicity indexes (.psi.0) of the colored peptides were also detd. because .psi.0 values are closely related to their water soly. A colored pentapeptide library was synthesized using the portioning-mixing method. Each component of this library contained the red azo dye (EPAB) and the penta-lysine tag. Before the last coupling step the samples were not mixed. All of the 19 sub-libraries obtained after cleavage were readily sol. in water, giving

intense red solns. The effect of chromophore (EPAB) and/or penta-lysine solubilizing tag on the biol. activity was also studied. Potencies of the bovine neurotensin 8-13 fragment and its different colored and penta-lysine derivs. were compared in isolated longitudinal muscle strips of guinea pig ileum. It was shown that the hexapeptide with penta-lysine tag had almost the same activity as the 8-13 fragment itself. The activity of the EPAB-deriv. was found to be rather low. However, the presence of the solubilizing tag in the colored hexapeptide compensated the neg. effect of the chromophore.

IT **212209-17-1P**

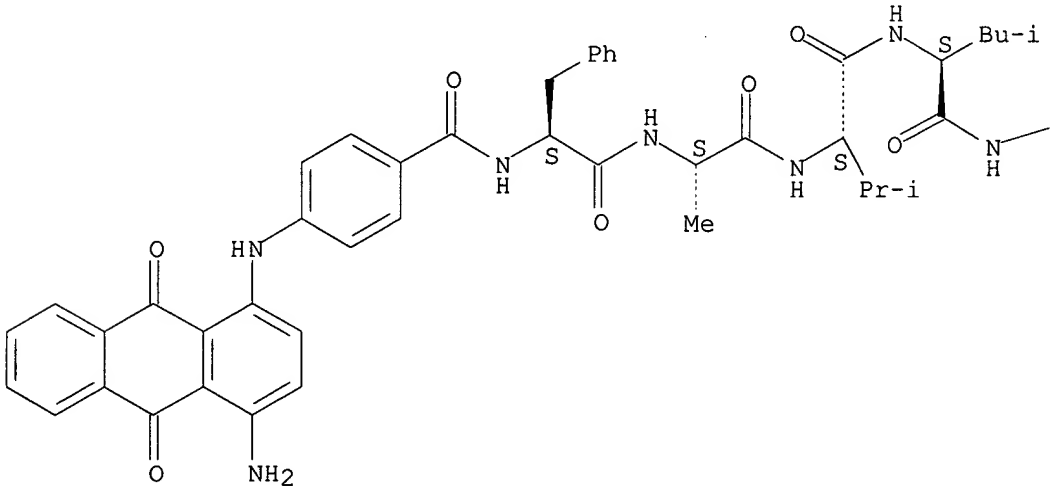
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., properties and use of dye conjugates in prepn. of peptides and combinatorial libraries)

RN 212209-17-1 CAPLUS

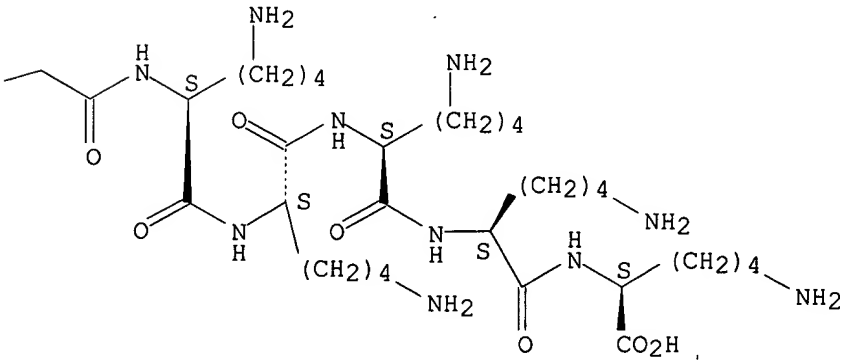
CN L-Lysine, N-[4-[(4-amino-9,10-dihydro-9,10-dioxo-1-anthracenyl)amino]benzoyl]-L-phenylalanyl-L-alanyl-L-valyl-L-leucylglycyl-L-lysyl-L-lysyl-L-lysyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



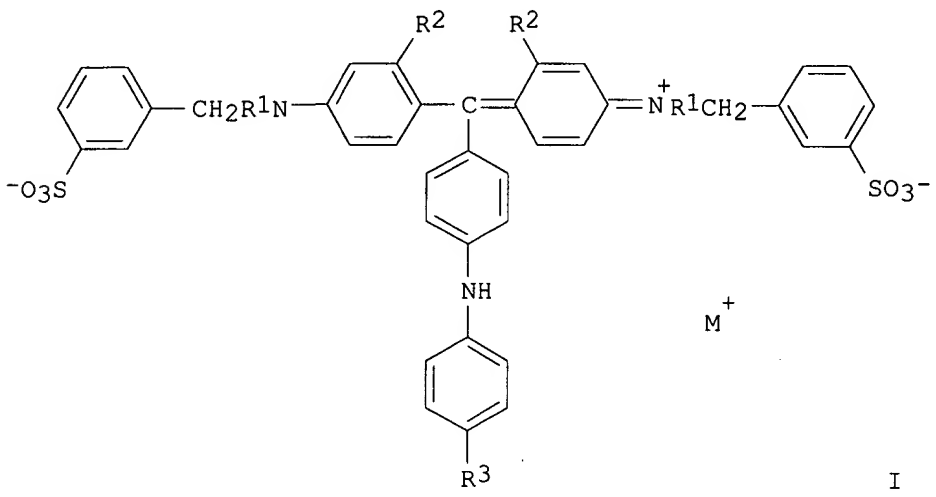
PAGE 1-B



L9 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:184100 CAPLUS
DOCUMENT NUMBER: 126:173020
TITLE: Dyes of salts of triphenylmethane compound with excellent solubility in alcohols and ink compositions containing them
INVENTOR(S): Ono, Takashi; Yagyu, Tatsuya; Saruwatari, Sachihiro
PATENT ASSIGNEE(S): Orient Chemical Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08333517	A2	19961217	JP 1995-141891	19950608

OTHER SOURCE(S): MARPAT 126:173020
TI Dyes of salts of triphenylmethane compound with excellent solubility in alcohols and ink compositions containing them
GI



I

AB Triphenylmethane dye I (R1 = C3-6 alkyl; R2 = H, Me; R3 = C1-4 alkyl or alkoxy; M+ = C6-20 org. ammonium; n = 1-2) is synthesized and used in the alc.-based inks. Thus, 106 g benzaldehyde was condensed with 58 g N-benzyl-N-butyl-m-toluidine, trisulfonated, oxidized with MnO2, and treated with 137 g p-phenetidine to give 500 g I (R1 = Bu, R2 = Me; R3 = OEt), 91 g of which was dissolved in H2O, adjusted to pH 7, filtrated, salted with 22.5 g 3-(2-ethylhexyloxy)propylamine at room temp. for 2 h, adjusted to pH 5-6, treated at 40.degree., filtrated, washed, and dried to
give a blue dye I (R1 = Bu; R2 = Me; R3 = OEt; M+ = NH3CH2CH2CH2CH2CHEtBu)
showing soly. in EtOH 25 g/100 mL and max. absorption wavelength 610 nm. An ink comprising the dye 7, EtOH 68, benzyl alc. 5, Et lactate 10, a ketone resin 5, and Tamanol 510 5 g showed good storage stability, light resistance, and water resistance.
IT **187101-99-1P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

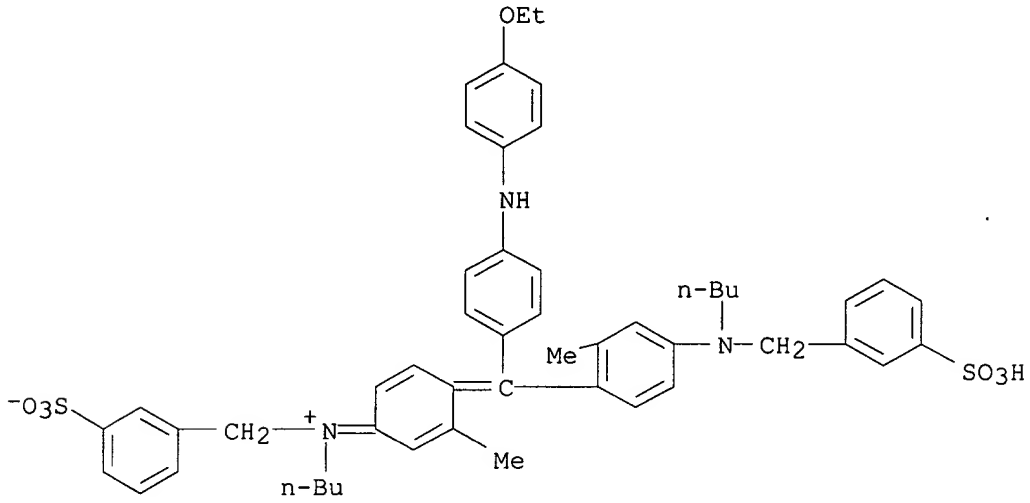
(dyes of salts of triphenylmethane compd. with good soly. in alc. solvents for inks)

RN 187101-99-1 CAPLUS

CN Benzenemethanaminium, N-butyl-N-[4-[[4-[butyl[(3-sulfophenyl)methyl]amino]-2-methylphenyl][4-[(4-ethoxyphenyl)amino]phenyl]methylene]-3-methyl-2,5-cyclohexadien-1-ylidene]-3-sulfo-, inner salt, compd. with 3-butoxy-1-propanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 187101-96-8
CMF C51 H57 N3 O7 S2



CM 2

CRN 16499-88-0
CMF C7 H17 N O

$H_2N-(CH_2)_3-OBu\text{-}n$

=> log h

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	43.77	65.71
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.88	-8.23

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:09:33 ON 01 OCT 2001
Connection closed by remote host

Trying 3106016892...Open

Welcome to STN International! Enter x:x

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LOGINID:ssspta1745sxt
PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:15:17 ON 01 OCT 2001
FILE 'CAPLUS' ENTERED AT 13:15:17 ON 01 OCT 2001
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    43.77      65.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -5.88      -8.23

=> file registry

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    43.77      65.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -5.88      -8.23

FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
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STRUCTURE FILE UPDATES:   30 SEP 2001  HIGHEST RN 359625-43-7
DICTIONARY FILE UPDATES:  30 SEP 2001  HIGHEST RN 359625-43-7

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Structure search limits have been increased.  See HELP SLIMIT
for details.

=> s polybiphenylaniline

             0 POLYBIPHENYLANILINE
L10          0 POLYBIPHENYLANILINE

=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1               STRUCTURE UPLOADED
L2               QUE L1
L3           50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                 S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4           50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5           52 S L4
L6            4 S L5 AND POLYMER?
                 S L1 AND POLY?
```

FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7 50 S L1

FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8 52 S L7
L9 10 S L8 AND POLY?

FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10 0 S POLYBIPHENYLANILINE

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.11	69.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.23

FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1947 - 1 Oct 2001 VOL 135 ISS 15
FILE LAST UPDATED: 30 Sep 2001 (20010930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

CAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.

=> s polybiphenylaniline

L11 1 POLYBIPHENYLANILINE

=> d his

(FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001

```
L1              STRUCTURE UPLOADED
L2              QUE L1
L3           50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4           50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5           52 S L4
L6            4 S L5 AND POLYMER?
                S L1 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7           50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8           52 S L7
L9           10 S L8 AND POLY?

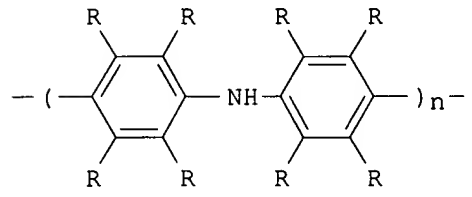
     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10           0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11           1 S POLYBIPHENYLANILINE

=> d 1 ibib ti abs hitstr


L11  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:         2000:705482  CAPLUS
DOCUMENT NUMBER:          133:298753
TITLE:                    Electrodes and batteries
INVENTOR(S):              Harada, Manabu; Nishiyama, Toshihiko; Fujiwara,
                          Masaki; Okada, Shinako; Kurosaki, Masato
PATENT ASSIGNEE(S):       Nec Corp., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 8 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     JP 2000277118      A2   20001006       JP 1999-76573     19990319
     JP 3183280         B2   20010709
TI   Electrodes and batteries
GI
```



I

```
AB   The electrodes use active mass contg. polybiphenylaniline
     derivs.  The derivs. are I, where R = H, halogen, OH, carboxy, sulfone,
```

sulfuric acid, nitro, cyano, alkyl, aryl, alkoxy, aryloxy, amino, alkylthio, arylthio, or heterocylic groups and may be different from each other. The batteries use the above electrodes as cathodes.

=> log h

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.05	73.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.59	-8.82

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:16:41 ON 01 OCT 2001
Connection closed by remote host

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:ssspta1745sxt
PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:17:33 ON 01 OCT 2001
FILE 'CAPLUS' ENTERED AT 13:17:33 ON 01 OCT 2001
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.05	73.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.59	-8.82

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.05	73.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.59	-8.82

FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1947 - 1 Oct 2001 VOL 135 ISS 15
FILE LAST UPDATED: 30 Sep 2001 (20010930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for

more information.

CAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.


```
=> s polymer? (5A) biphenylaniline

       1372220 POLYMER?
         69521 POLYMD
         69521 POLYMD
                 (POLYMD)
         24767 POLYMG
        261007 POLYMN
          6153 POLYMNS
        261758 POLYMN
                 (POLYMN OR POLYMNS)
       1423063 POLYMER?
                 (POLYMER? OR POLYMD OR POLYMG OR POLYMN)
             0 BIPHENYLANILINE
L12          0 POLYMER? (5A) BIPHENYLANILINE

=> file registry

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       3.43      77.30

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -8.82

FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES:   30 SEP 2001  HIGHEST RN 359625-43-7
DICTIONARY FILE UPDATES:  30 SEP 2001  HIGHEST RN 359625-43-7

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Structure search limits have been increased.  See HELP SLIMIT
for details.

=> s biphenylaniline

             0 BIPHENYLANILINE
L13          0 BIPHENYLANILINE

=> d his
```

```
     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1             STRUCTURE UPLOADED
L2             QUE L1
L3          50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
               S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4          50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5          52 S L4
L6           4 S L5 AND POLYMER?
               S L1 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7          50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8          52 S L7
L9          10 S L8 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10          0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11          1 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12          0 S POLYMER? (5A) BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13          0 S BIPHENYLANILINE

=> log h

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       4.11      81.41

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -8.82

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:18:49 ON 01 OCT 2001
Connection closed by remote host

Trying 3106016892...Open

Welcome to STN International!  Enter x:x
LOGINID:ssspta1745sxt
PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 13:20:28 ON 01 OCT 2001
FILE 'REGISTRY' ENTERED AT 13:20:28 ON 01 OCT 2001
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       4.11      81.41

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
```

```
                                                    ENTRY     SESSION
CA SUBSCRIBER PRICE                                  0.00      -8.82

=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1              STRUCTURE UPLOADED
L2              QUE L1
L3           50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4           50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5           52 S L4
L6            4 S L5 AND POLYMER?
                S L1 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7           50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8           52 S L7
L9           10 S L8 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10           0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11           1 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12           0 S POLYMER? (5A) BIPHENYLANILINE

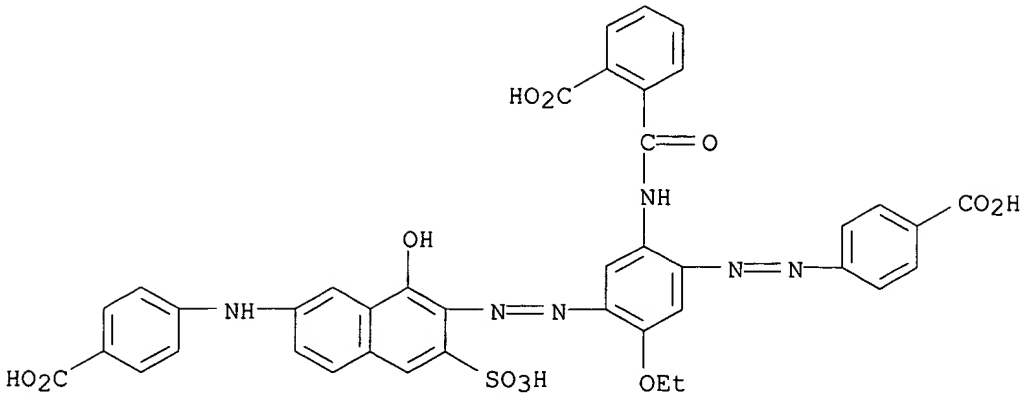
     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13           0 S BIPHENYLANILINE

=> d scan l3 1-10

'1-10' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L3   50 ANSWERS   REGISTRY  COPYRIGHT 2001 ACS
IN   Benzoic acid, 2-[[[5-[[7-[(4-carboxyphenyl)amino]-1-hydroxy-3-sulfo-2-

naphthalenyl]azo]-2-[(4-carboxyphenyl)azo]-4-ethoxyphenyl]amino]carbonyl]-
     , triammonium salt (9CI)
MF   C40 H30 N6 O12 S . 3 H3 N
```



● 3 NH_3

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

```
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented,
with text labels.

For additional information, please consult the following help
messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0


=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1             STRUCTURE UPLOADED
L2             QUE L1
L3          50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
               S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4          50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5          52 S L4
L6           4 S L5 AND POLYMER?
               S L1 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7          50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8          52 S L7
L9          10 S L8 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10          0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11          1 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12          0 S POLYMER? (5A) BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13          0 S BIPHENYLANILINE

=> d 13 1

L13 HAS NO ANSWERS
L13          0 SEA FILE=REGISTRY ABB=ON  PLU=ON  BIPHENYLANILINE


=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1             STRUCTURE UPLOADED
L2             QUE L1
```

```
L3           50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4           50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5           52 S L4
L6            4 S L5 AND POLYMER?
                S L1 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7           50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8           52 S L7
L9           10 S L8 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10           0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11           1 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12           0 S POLYMER? (5A) BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13           0 S BIPHENYLANILINE

=> file registry

COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   4.42      81.72

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                   0.00      -8.82

FILE 'REGISTRY' ENTERED AT 13:21:06 ON 01 OCT 2001
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STRUCTURE FILE UPDATES:   30 SEP 2001  HIGHEST RN 359625-43-7
DICTIONARY FILE UPDATES:  30 SEP 2001  HIGHEST RN 359625-43-7

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Structure search limits have been increased.  See HELP SLIMIT
for details.

=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1             STRUCTURE UPLOADED
L2             QUE L1
```

```
L3            50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4            50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5            52 S L4
L6             4 S L5 AND POLYMER?
                S L1 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7            50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8            52 S L7
L9            10 S L8 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10            0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11            1 S POLYBIPHENYLANILINE

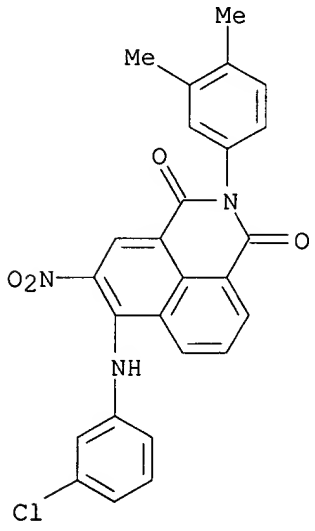
     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12            0 S POLYMER? (5A) BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13            0 S BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:21:06 ON 01 OCT 2001

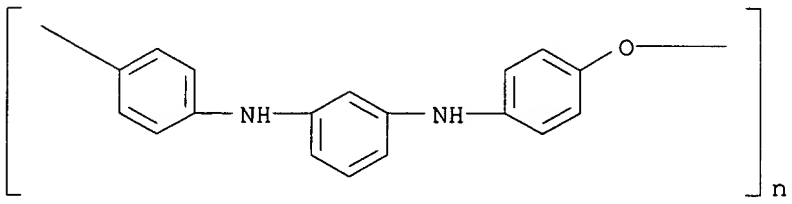
=> d l3 1


L3   ANSWER 1 OF 50  REGISTRY  COPYRIGHT 2001 ACS
RN   358371-49-0  REGISTRY
CN   1H-Benz[de]isoquinoline-1,3(2H)-dione, 6-[(3-chlorophenyl)amino]-2-(3,4-
     dimethylphenyl)-5-nitro- (9CI)  (CA INDEX NAME)
FS   3D CONCORD
MF   C26 H18 Cl N3 O4
SR   Chemical Library
```



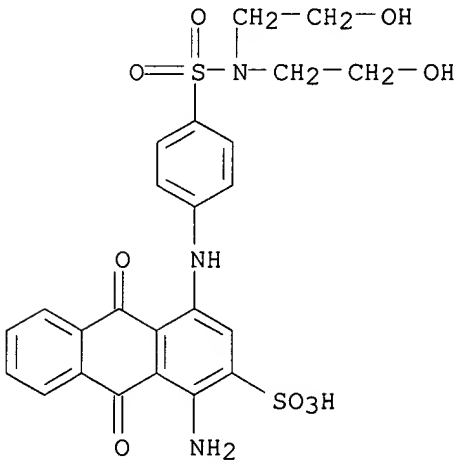
=> d scan l3

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Poly(oxy-1,4-phenyleneimino-1,3-phenyleneimino-1,4-phenylene) (9CI)
MF (C18 H14 N2 O)n
CI PMS



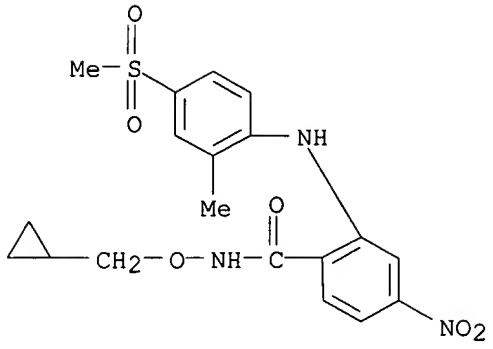
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[[bis(2-hydroxyethyl)amino]sulfonyl]phenyl]amino]-9,10-dihydro-9,10-dioxo-, monoammonium salt (9CI)
MF C24 H23 N3 O9 S2 . H3 N
CI COM



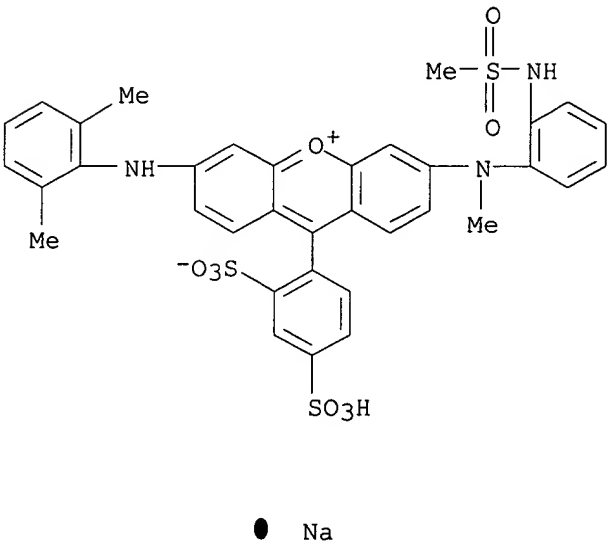
● NH_3

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzamide, N-(cyclopropylmethoxy)-2-[[2-methyl-4-(methylsulfonyl)phenyl]amino]-4-nitro- (9CI)
MF C19 H21 N3 O6 S



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

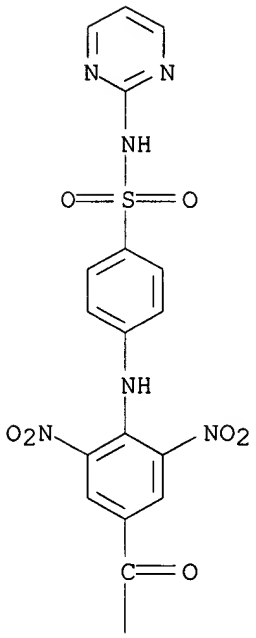
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Xanthylium, 3-[(2,6-dimethylphenyl)amino]-9-(2,4-disulfophenyl)-6-[[2-[(methylsulfonyl)amino]phenyl]amino]-, inner salt, monosodium salt (9CI)
MF C35 H31 N3 O9 S3 . Na



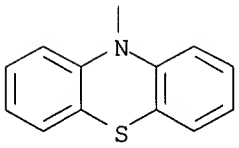
● Na

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 10H-Phenothiazine, 10-[3,5-dinitro-4-[[4-[(2-pyrimidinylamino)sulfonyl]phenyl]amino]benzoyl]- (9CI)
MF C29 H19 N7 O7 S2

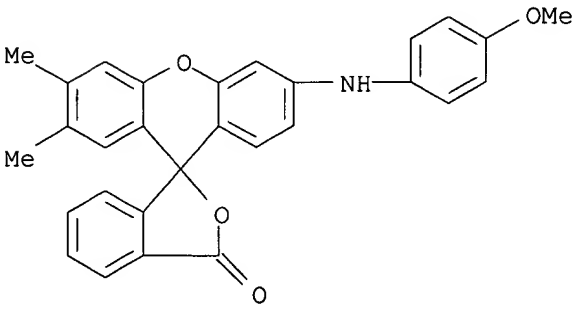
PAGE 1-A



PAGE 2-A



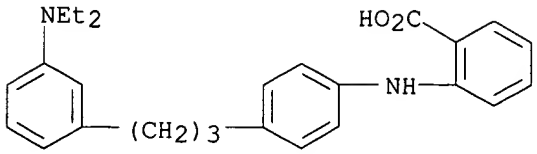
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 6'-[(4-methoxyphenyl)amino]-2',3'-dimethyl- (9CI)
MF C29 H23 N O4



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

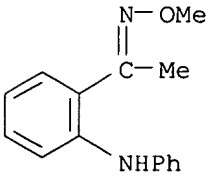
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS

IN Benzoic acid, 2-[[4-[3-[3-(diethylamino)phenyl]propyl]phenyl]amino]-
(9CI)
MF C26 H30 N2 O2

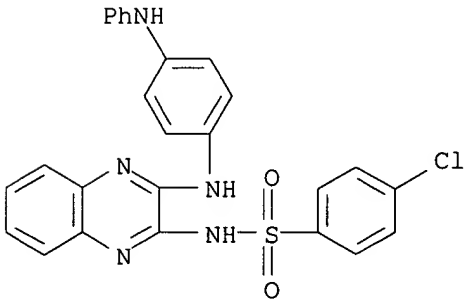


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

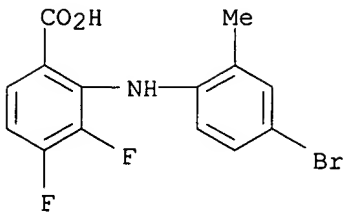
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Ethanone, 1-[2-(phenylamino)phenyl]-, O-methyloxime (9CI)
MF C15 H16 N2 O



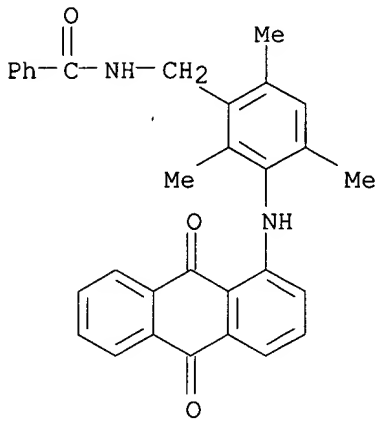
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenesulfonamide, 4-chloro-N-[3-[[4-(phenylamino)phenyl]amino]-2-
quinoxalinyl]- (9CI)
MF C26 H20 Cl N5 O2 S



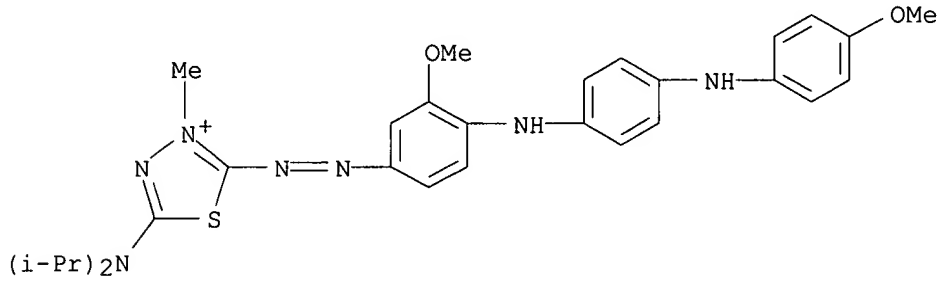
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzoic acid, 2-[(4-bromo-2-methylphenyl)amino]-3,4-difluoro- (9CI)
MF C14 H10 Br F2 N O2



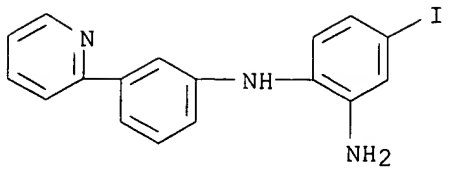
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzamide, N-[[3-[(9,10-dihydro-9,10-dioxo-1-anthracenyl)amino]-2,4,6-trimethylphenyl]methyl]- (9CI)
MF C31 H26 N2 O3



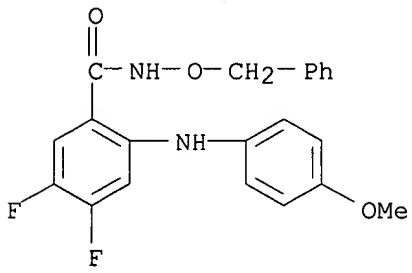
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 1,3,4-Thiadiazolium, 5-[bis(1-methylethyl)amino]-2-[[3-methoxy-4-[[4-[(4-methoxyphenyl)amino]phenyl]amino]phenyl]azo]-3-methyl- (9CI)
MF C29 H36 N7 O2 S
CI COM



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 1,2-Benzenediamine, 4-iodo-N1-[3-(2-pyridinyl)phenyl]- (9CI)
MF C17 H14 I N3

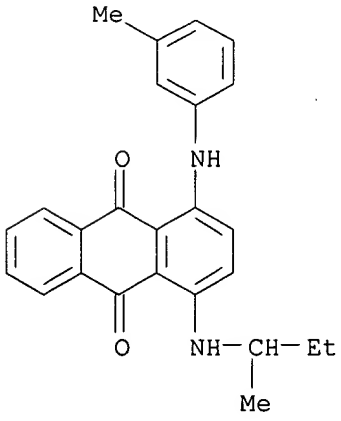


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzamide, 4,5-difluoro-2-[(4-methoxyphenyl)amino]-N-(phenylmethoxy)-(9CI)
MF C21 H18 F2 N2 O3

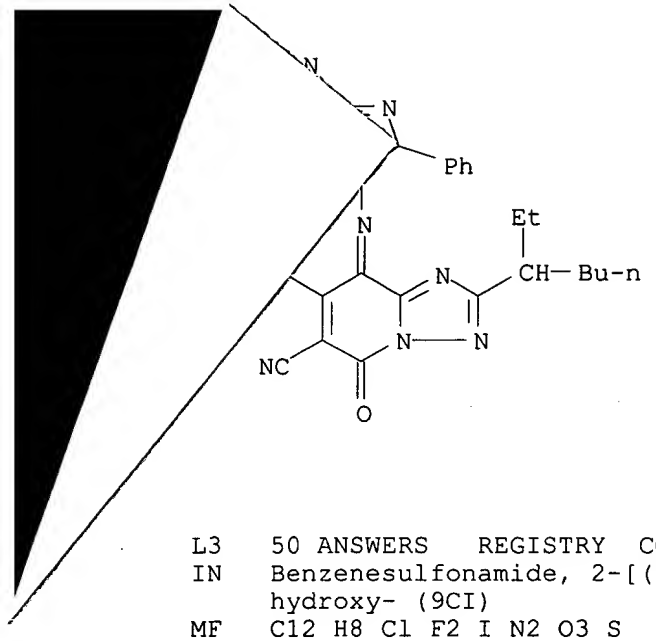


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN [1,2,4]Triazolo[1,5-a]pyridine-6-carbonitrile, 8-[[2-(dibutylamino)-4-phenyl-5-thiazolyl]imino]-2-(1-ethylpentyl)-5,8-dihydro-7-methyl-5-oxo-, mixt. with 1-[(3-methylphenyl)amino]-4-[(1-methylpropyl)amino]-9,10-anthracenedione (9CI)
MF C32 H41 N7 O S . C25 H24 N2 O2
CI MXS

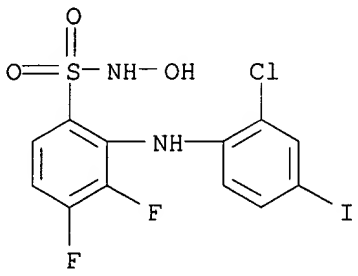
CM 1



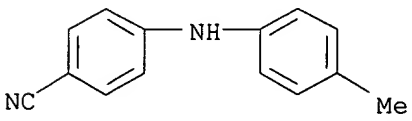
CM 2



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenesulfonamide, 2-[(2-chloro-4-iodophenyl)amino]-3,4-difluoro-N-hydroxy- (9CI)
MF C12 H8 Cl F2 I N2 O3 S



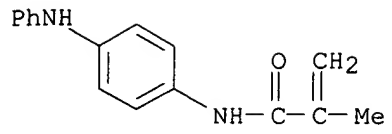
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzonitrile, 4-[(4-methylphenyl)amino]- (9CI)
MF C14 H12 N2



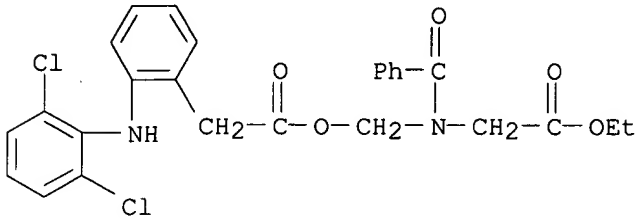
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 2-Propenamide, 2-methyl-N-[4-(phenylamino)phenyl]-, homopolymer (9CI)
MF (C16 H16 N2 O)x
CI PMS

CM 1

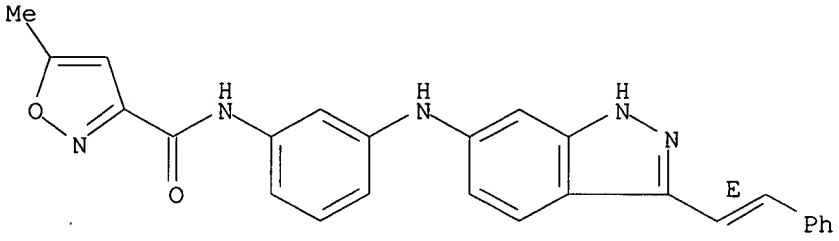


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, [benzoyl(2-ethoxy-2-oxoethyl)amino]methyl ester (9CI)
MF C26 H24 Cl2 N2 O5

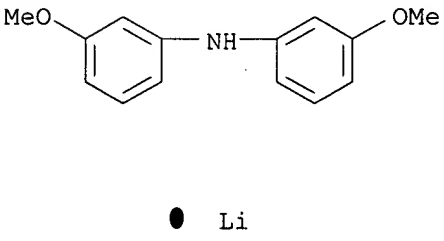


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 3-Isoxazolecarboxamide, 5-methyl-N-[3-[[3-[(1E)-2-phenylethenyl]-1H-indazol-6-yl]amino]phenyl]- (9CI)
MF C26 H21 N5 O2

Double bond geometry as shown.



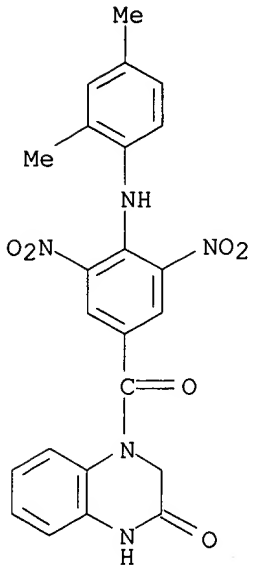
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenamine, 3-methoxy-N-(3-methoxyphenyl)-, lithium salt (9CI)
MF C14 H15 N O2 . Li



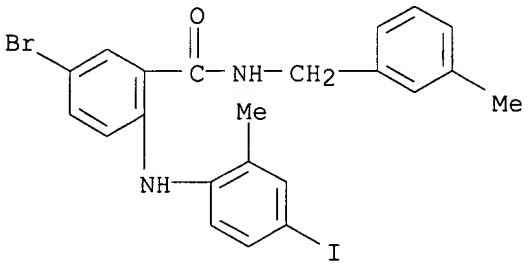
● Li

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 2(1H)-Quinoxalinone,
4-[4-[(2,4-dimethylphenyl)amino]-3,5-dinitrobenzoyl]-

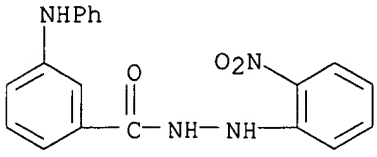
3,4-dihydro- (9CI)
MF C23 H19 N5 O6



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzamide, 5-bromo-2-[(4-iodo-2-methylphenyl)amino]-N-[(3-methylphenyl)methyl]- (9CI)
MF C22 H20 Br I N2 O

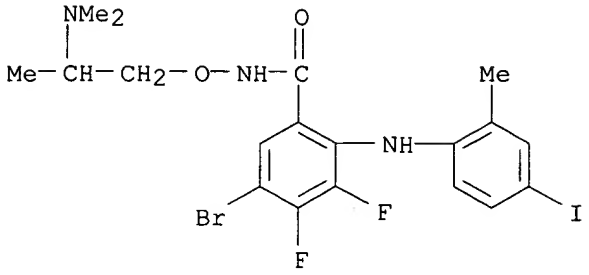


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzoic acid, 3-(phenylamino)-, 2-(2-nitrophenyl)hydrazide (9CI)
MF C19 H16 N4 O3



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzamide,
5-bromo-N-[2-(dimethylamino)propoxy]-3,4-difluoro-2-[(4-iodo-2-

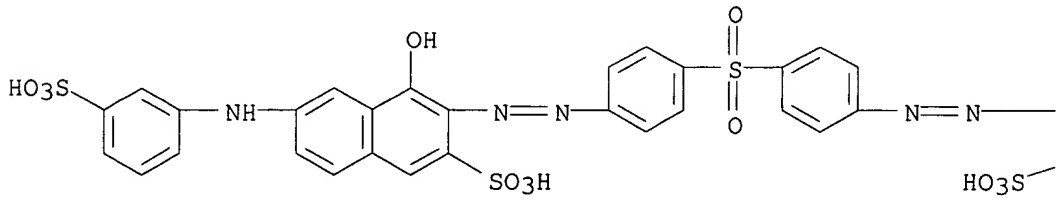
methylphenyl)amino]- (9CI)
MF C19 H21 Br F2 I N3 O2



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzoic acid,
2-hydroxy-4-[[5-hydroxy-6-[[4-[[4-[[1-hydroxy-3-sulfo-7-[(3-

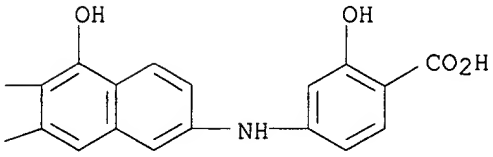
sulfophenyl)amino]-2-naphthalenyl]azo]phenyl]sulfonyl]phenyl]azo]-7-sulfo-
2-naphthalenyl]amino]-, tetraammonium salt (9CI)
MF C45 H32 N6 O16 S4 . 4 H3 N

PAGE 1-A

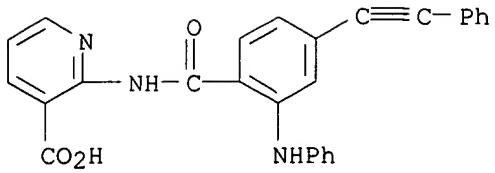


● 4 NH_3

PAGE 1-B



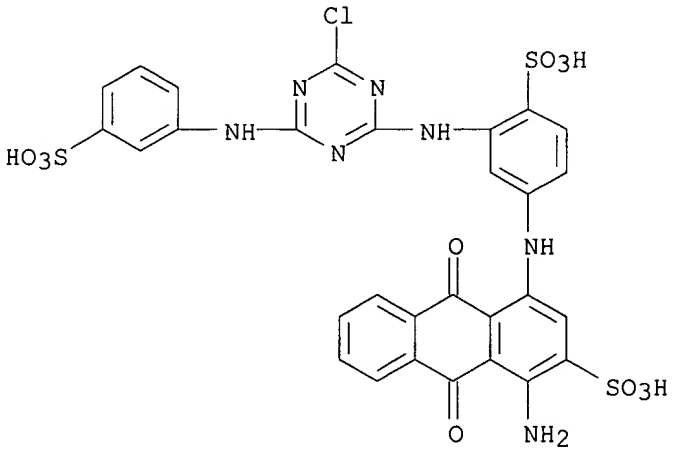
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 3-Pyridinecarboxylic acid, 2-[[2-(phenylamino)-4-
(phenylethynyl)benzoyl]amino]- (9CI)
MF C27 H19 N3 O3



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 2-Anthracenesulfonic acid, 1-amino-4-[[3-[[4-chloro-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino]-4-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, lithium sodium salt (9CI)
MF C29 H20 Cl N7 O11 S3 . x Li . x Na

PAGE 1-A

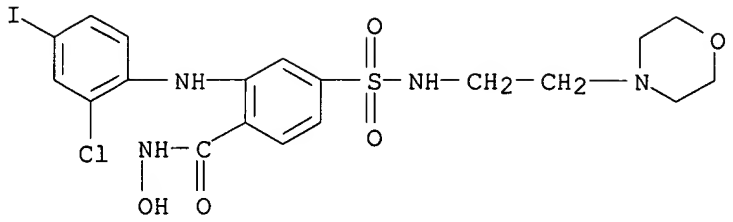


● x Li

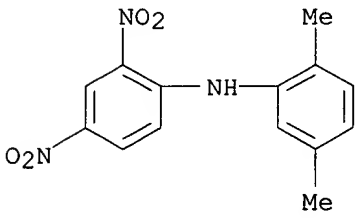
PAGE 2-A

● x Na

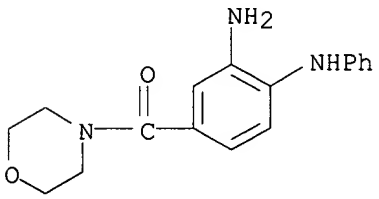
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzamide, 2-[(2-chloro-4-iodophenyl)amino]-N-hydroxy-4-[[[2-(4-morpholinyl)ethyl]amino]sulfonyl]- (9CI)
MF C19 H22 Cl I N4 O5 S



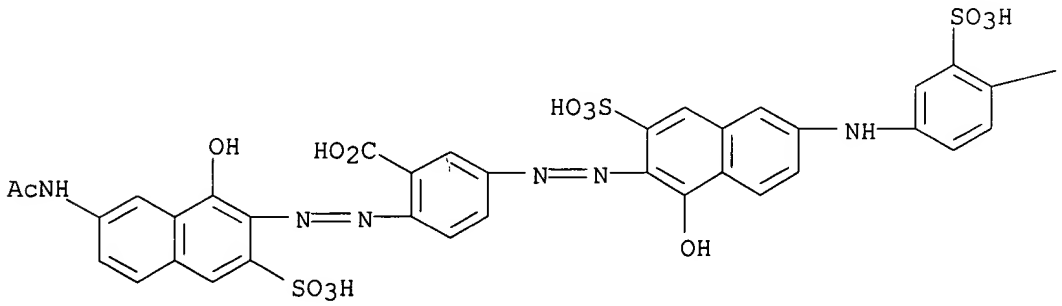
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenamine, N-(2,5-dimethylphenyl)-2,4-dinitro- (9CI)
MF C14 H13 N3 O4



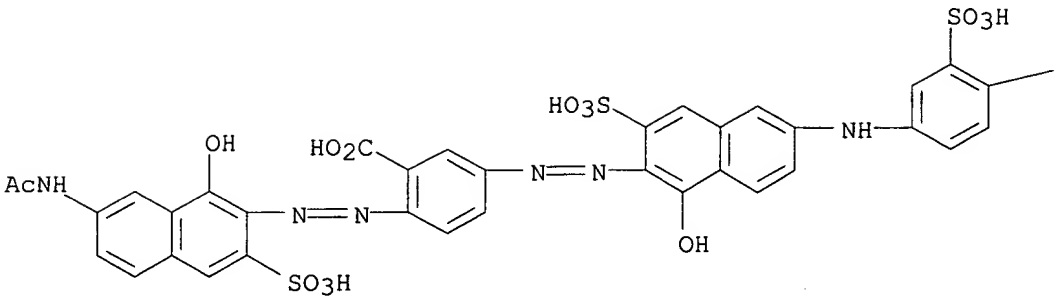
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Morpholine, 4-[3-amino-4-(phenylamino)benzoyl]- (9CI)
MF C17 H19 N3 O2



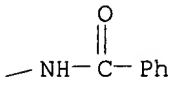
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzoic acid,
2-[[7-(acetylamino)-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-5-
[[6-[[4-(benzoylamino)-3-sulfophenyl]amino]-1-hydroxy-3-sulfo-2-
naphthalenyl]azo]- (9CI)
MF C42 H31 N7 O15 S3



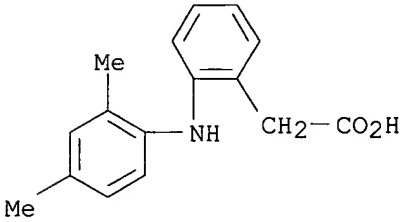
PAGE 1-A



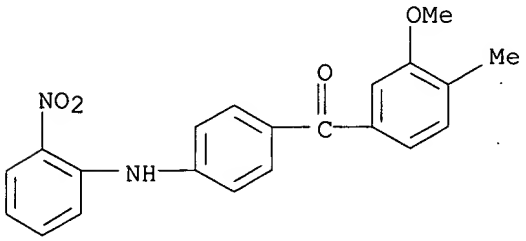
PAGE 1-B



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzeneacetic acid, 2-[(2,4-dimethylphenyl)amino]- (9CI)
MF C16 H17 N O2

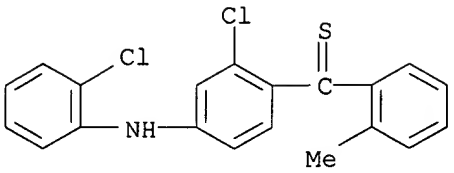


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Methanone, (3-methoxy-4-methylphenyl)[4-[(2-nitrophenyl)amino]phenyl]-
(9CI)
MF C21 H18 N2 O4

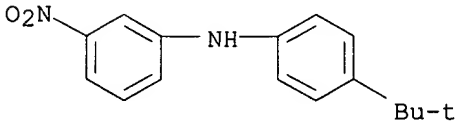


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Methanethione,
[2-chloro-4-[(2-chlorophenyl)amino]phenyl](2-methylphenyl)-

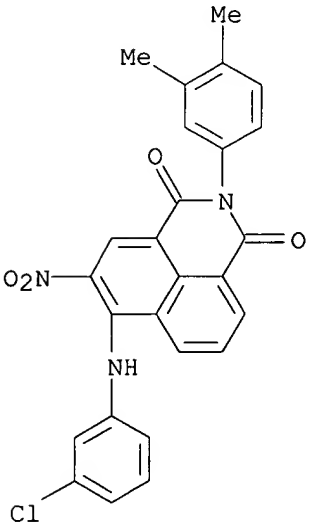
(9CI)
MF C20 H15 Cl2 N S



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenamine, N-[4-(1,1-dimethylethyl)phenyl]-3-nitro- (9CI)
MF C16 H18 N2 O2

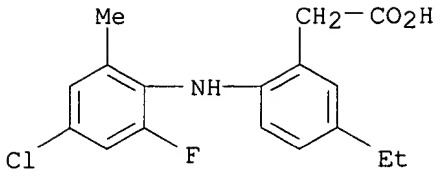


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 6-[(3-chlorophenyl)amino]-2-(3,4-dimethylphenyl)-5-nitro- (9CI)
MF C26 H18 Cl N3 O4



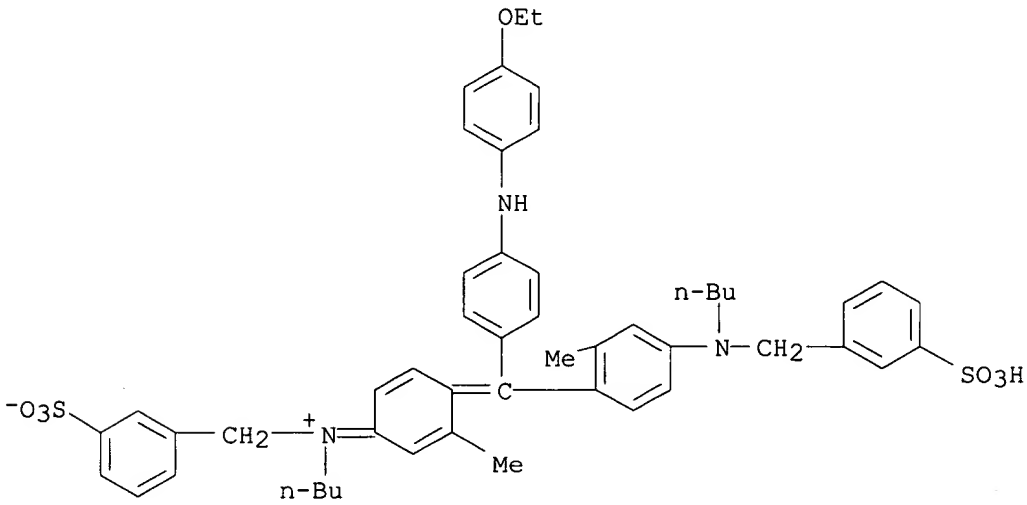
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzeneacetic acid, 2-[(4-chloro-2-fluoro-6-methylphenyl)amino]-5-ethyl-(9CI)
MF C17 H17 Cl F N O2

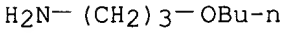


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenemethanaminium,
N-butyl-N-[4-[[4-[butyl[(3-sulfophenyl)methyl]amino]-
2-methylphenyl][4-[(4-ethoxyphenyl)amino]phenyl]methylene]-3-methyl-2,5-
cyclohexadien-1-ylidene]-3-sulfo-, inner salt, compd. with
3-butoxy-1-propanamine (1:1) (9CI)
MF C51 H57 N3 O7 S2 . C7 H17 N O

CM 1

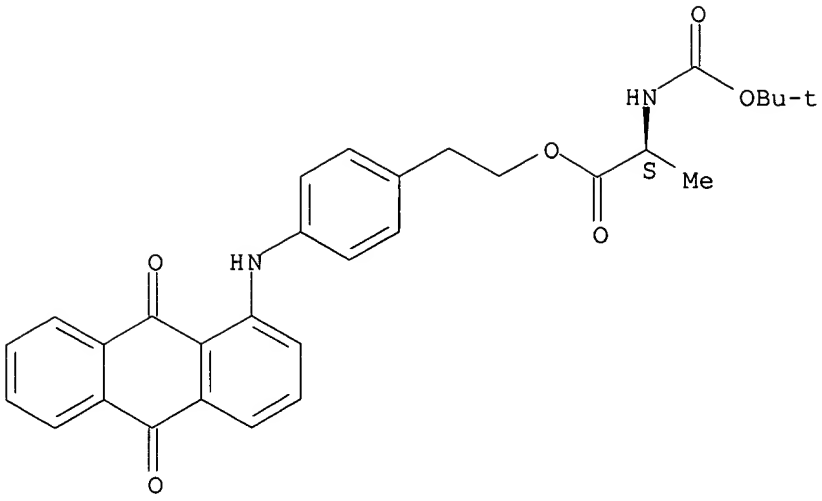


CM 2

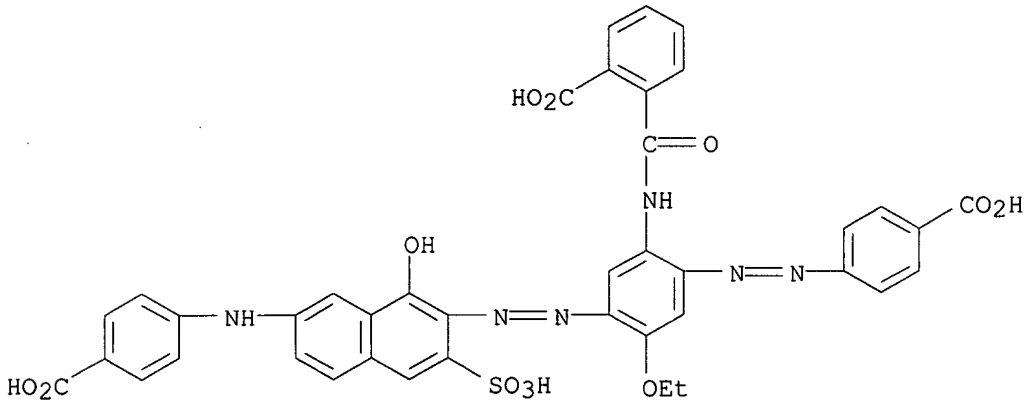


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-, 2-[4-[(9,10-dihydro-9,10-
dioxo-1-anthracenyl)amino]phenyl]ethyl ester (9CI)
MF C30 H30 N2 O6

Absolute stereochemistry.



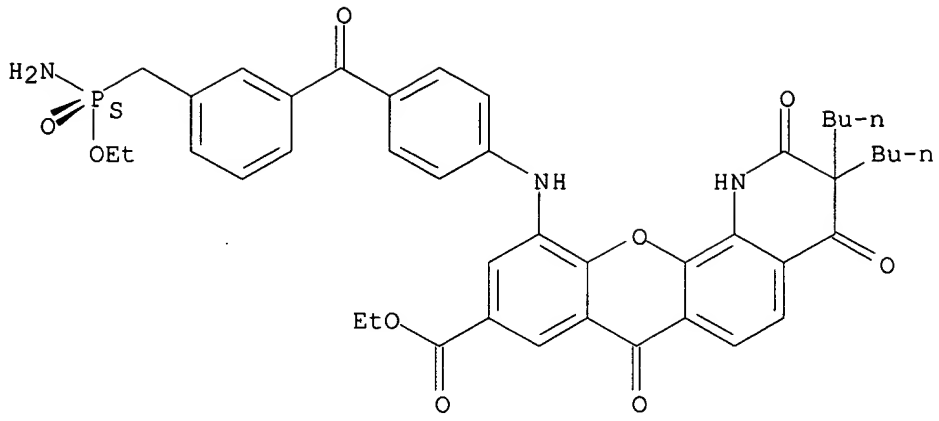
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzoic acid, 2-[[[5-[[7-[(4-carboxyphenyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2-[(4-carboxyphenyl)azo]-4-ethoxyphenyl]amino]carbonyl]-, triammonium salt (9CI)
MF C40 H30 N6 O12 S . 3 H3 N



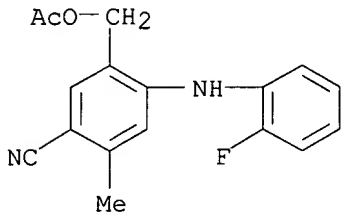
● 3 NH_3

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 1H-[1]Benzopyrano[3,2-h]quinoline-9-carboxylic acid, 11-[[4-[3-[[(S)-aminoethoxyphosphinyl]methyl]benzoyl]phenyl]amino]-3,3-dibutyl-2,3,4,7-tetrahydro-2,4,7-trioxo-, ethyl ester (9CI)
MF C43 H46 N3 O9 P

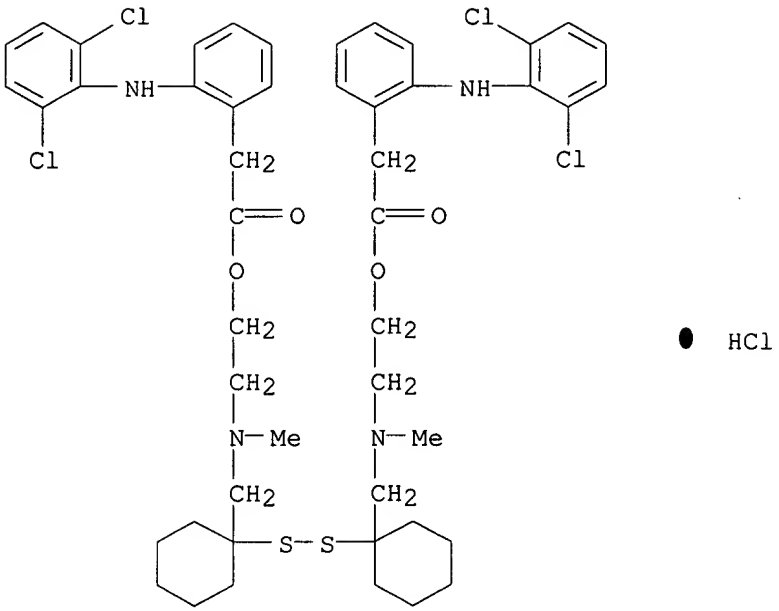
Absolute stereochemistry.



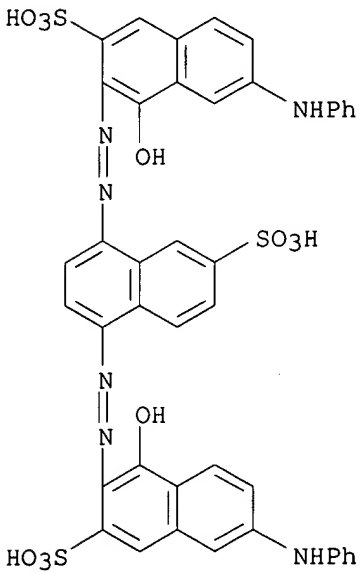
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzonitrile, 5-[(acetyloxy)methyl]-4-[(2-fluorophenyl)amino]-2-methyl- (9CI)
MF C17 H15 F N2 O2



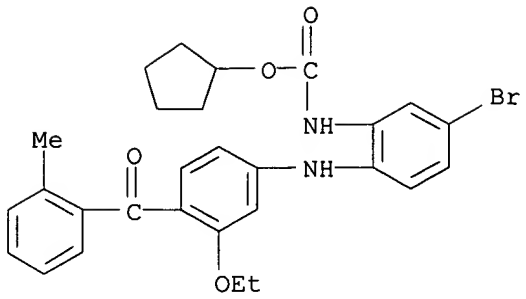
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, dithiobis[cyclohexylidenemethylene(methylimino)-2,1-ethanediyl] ester, monohydrochloride (9CI)
MF C48 H58 Cl4 N4 O4 S2 . Cl H



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN 2-Naphthalenesulfonic acid, 5-[[1-hydroxy-6-(phenylamino)-3-sulfo-2-naphthalenyl]azo]-8-[[1-hydroxy-7-(phenylamino)-3-sulfo-2-naphthalenyl]azo]- (9CI)
MF C42 H30 N6 O11 S3



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Carbamic acid, [5-bromo-2-[[3-ethoxy-4-(2-methylbenzoyl)phenyl]amino]phenyl]-, cyclopentyl ester (9CI)
MF C28 H29 Br N2 O4

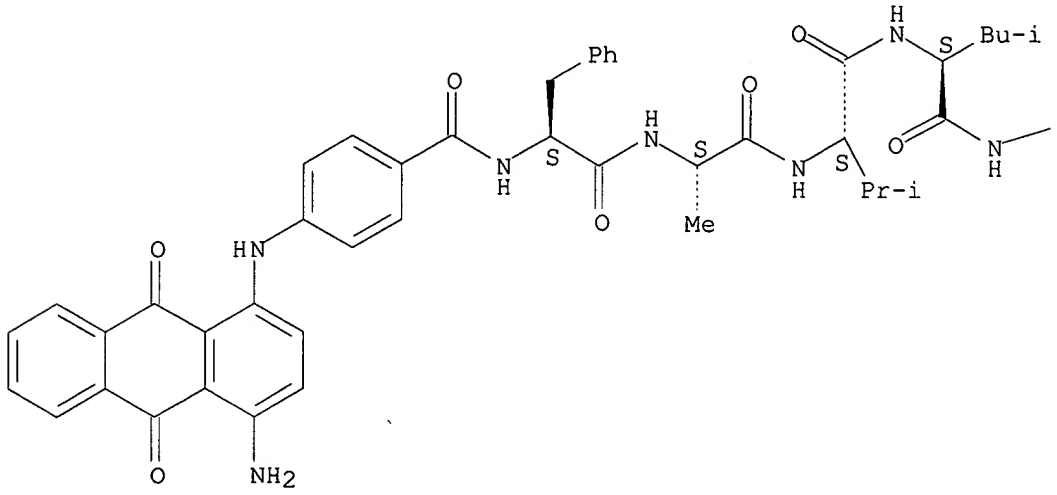


L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN L-Lysine, N-[4-[(4-amino-9,10-dihydro-9,10-dioxo-1-

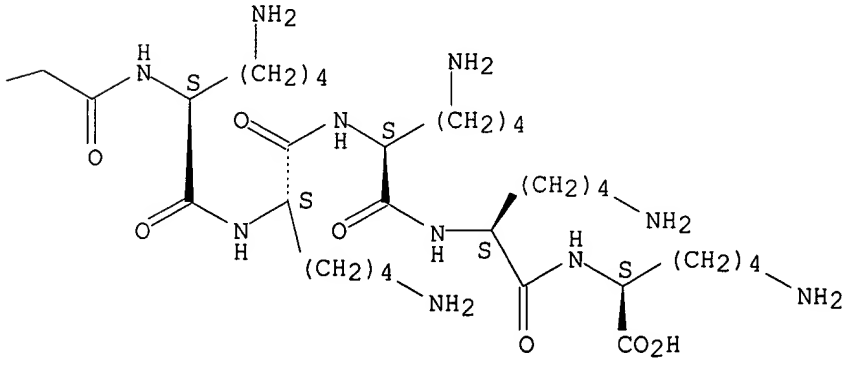
anthracenyl)amino]benzoyl]-L-phenylalanyl-L-alanyl-L-valyl-L-leucylglycyl-
L-lysyl-L-lysyl-L-lysyl-L-lysyl- (9CI)
SQL 10
MF C76 H111 N17 O14

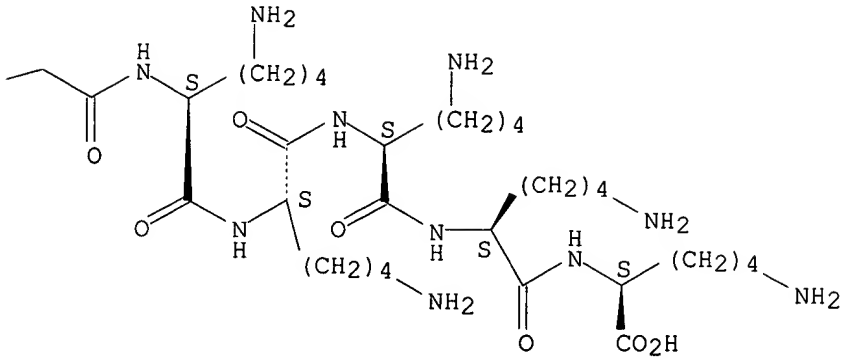
Absolute stereochemistry.

PAGE 1-A



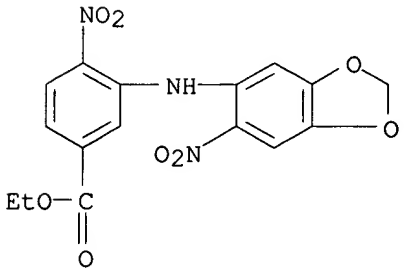
PAGE 1-B





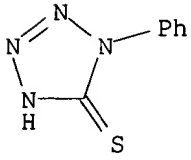
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzoic acid, 4-nitro-3-[(6-nitro-1,3-benzodioxol-5-yl)amino]-, ethyl ester (9CI)
MF C16 H13 N3 O8



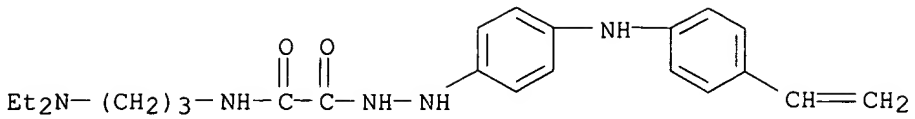
L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Acetic acid, [[3-(diethylamino)propyl]amino]oxo-, 2-[4-[(4-ethenylphenyl)amino]phenyl]hydrazide, telomer with 1,2-dihydro-1-phenyl-5H-tetrazole-5-thione (9CI)
MF (C23 H31 N5 O2)x . C7 H6 N4 S

CM 1



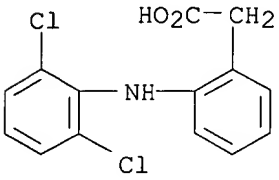
CM 2

CM 3



L3 50 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzeneacetic acid, 2-[(2,6-dichlorophenyl)amino]-, compd. with N-butyl-1-butanamine (1:1) (9CI)
MF C14 H11 Cl2 N O2 . C8 H19 N

CM 1



CM 2

ALL ANSWERS HAVE BEEN SCANNED

=> log h

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.36	85.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.82

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:24:56 ON 01 OCT 2001
Connection closed by remote host

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:ssspta1745sxt
PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 13:27:57 ON 01 OCT 2001
FILE 'REGISTRY' ENTERED AT 13:27:57 ON 01 OCT 2001
COPYRIGHT (C) 2001 American Chemical Society (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL

	ENTRY	SESSION
FULL ESTIMATED COST	3.36	85.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.82

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.36	85.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.82

FILE 'REGISTRY' ENTERED AT 13:28:03 ON 01 OCT 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 30 SEP 2001 HIGHEST RN 359625-43-7
DICTIONARY FILE UPDATES: 30 SEP 2001 HIGHEST RN 359625-43-7

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT for details.

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=>
Uploading c:\stnexp4\queries\phenyl3.str

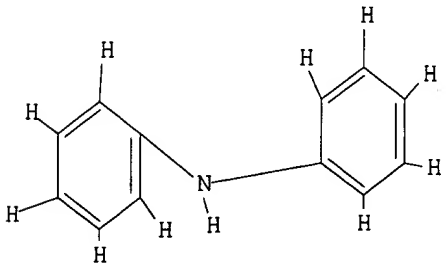
L14 STRUCTURE UPLOADED

=> que L14

L15 QUE L14

=> d l14

L14 HAS NO ANSWERS
L14 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s dl14 sam

SAMPLE IS IGNORED AS A SCOPE FOR THIS SEARCH
L16          0 DL14

=> s l14 sam

SAMPLE SEARCH INITIATED 13:29:01 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   9510 TO ITERATE

 10.5% PROCESSED    1000 ITERATIONS                                  3 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       184366 TO   196034
PROJECTED ANSWERS:             250 TO      890

L17           3 SEA SSS SAM L14

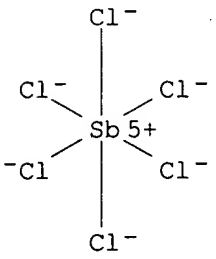
=> d scan


L17  3 ANSWERS   REGISTRY  COPYRIGHT 2001 ACS
IN   Antimonate(1-), hexachloro-, (OC-6-11)-, salt with N-phenylbenzenamine
     (1:1) (9CI)
MF   C12 H11 N . Cl6 Sb

     CM   1

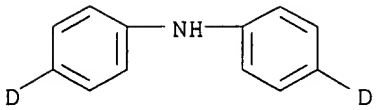

Ph—NH—Ph


     CM   2
```




```
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2


L17  3 ANSWERS   REGISTRY  COPYRIGHT 2001 ACS
IN   Benzen-4-d-amine, N-(phenyl-4-d)- (9CI)
MF   C12 H9 D2 N
```



L17 3 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Benzenamine, N-phenyl-, polymer with benzene and 1,1'-oxybis[benzene] (9CI)
MF (C12 H11 N . C12 H10 O . C6 H6)x
CI PMS

CM 1

Ph—NH—Ph

CM 2

Ph—O—Ph

CM 3

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.73	89.81

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.82

FILE 'CAPLUS' ENTERED AT 13:29:53 ON 01 OCT 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1947 - 1 Oct 2001 VOL 135 ISS 15

FILE LAST UPDATED: 30 Sep 2001 (20010930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

CAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.

=> d his

(FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1 STRUCTURE UPLOADED
L2 QUE L1
L3 50 S L1 SAM

FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
S L1 AND POLYMER?

FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4 50 S L1

FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5 52 S L4
L6 4 S L5 AND POLYMER?
S L1 AND POLY?

FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7 50 S L1

FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8 52 S L7
L9 10 S L8 AND POLY?

FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10 0 S POLYBIPHENYLANILINE

FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11 1 S POLYBIPHENYLANILINE

FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12 0 S POLYMER? (5A) BIPHENYLANILINE

FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13 0 S BIPHENYLANILINE

FILE 'REGISTRY' ENTERED AT 13:21:06 ON 01 OCT 2001

FILE 'REGISTRY' ENTERED AT 13:28:03 ON 01 OCT 2001

```
L14             STRUCTURE UPLOADED
L15             QUE L14
L16           0 S DL14 SAM
L17           3 S L14 SAM

     FILE 'CAPLUS' ENTERED AT 13:29:53 ON 01 OCT 2001

=> s l14 and polymer?

 REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.



SAMPLE SEARCH INITIATED 13:30:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   9510 TO ITERATE

 10.5% PROCESSED    1000 ITERATIONS                                 3 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       184366 TO   196034
PROJECTED ANSWERS:             250 TO      890

L18           3 SEA SSS SAM L14



L19           4 L18


       1372220 POLYMER?
         69521 POLYMD
         69521 POLYMD
                 (POLYMD)
         24767 POLYMG
        261007 POLYMN
          6153 POLYMNS
        261758 POLYMN
                 (POLYMN OR POLYMNS)
       1423063 POLYMER?
                 (POLYMER? OR POLYMD OR POLYMG OR POLYMN)
L20           1 L19 AND POLYMER?

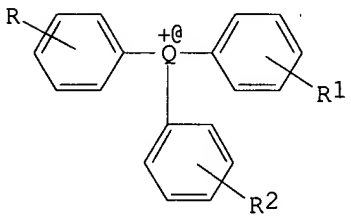
=> d ibib ti abs hitstr


L20  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:         1985:422206  CAPLUS
DOCUMENT NUMBER:          103:22206
TITLE:                    Polymer-supported di- and triphenylated
                          cation radicals and their use as Diels-Alder
catalysts
INVENTOR(S):              Bauld, Nathan L.; Bellville, Dennis J.
PATENT ASSIGNEE(S):       University of Texas System, USA
SOURCE:                   U.S., 7 pp.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
```

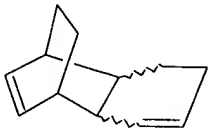
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4503195	A	19850305	US 1981-317019	19811102

TI **Polymer**-supported di- and triphenylated cation radicals and their use as Diels-Alder catalysts

GI



I



III

AB Triphenylated cation radicals I (R = **polymer**, R1, R2 = H, alkyl, OH, halo, haloalkyl, cyano, carbonyl, NO2, cyano; Q = N, P, As, Sb, Bi; X- = anion), covalently bonded to **polymer** supports, were prepd. as Diels-Alder catalysts. Thus, chloromethylated polystyrene was treated with Ph3N-AlCl3, to give a supported Ph3N **polymer**, which was activated by treatment with SbCl5 to give [Ph3N+.bul. SbCl6-]-substituted polystyrene (II). II was as effective as unsupported Ph3NSbCl6 in catalyzing the Diels-Alder cyclodimerization of 1,3-cyclohexadiene, to give 70% product III in a 5:1 endo-exo ratio. The uncatalyzed cyclodimerization of 1,3-cyclohexadiene gave a 4:1 endo-exo ratio of III.

IT **96851-98-8DP**, polystyrene supported
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for use as Diels-Alder catalysts)

RN 96851-98-8 CAPLUS

CN Antimonate(1-), hexachloro-, (OC-6-11)-, salt with N-phenylbenzenamine (1:1) (9CI) (CA INDEX NAME)

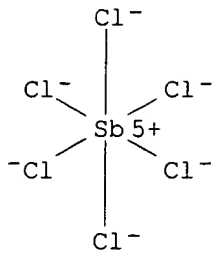
CM 1

CRN 35653-35-1
CMF C12 H11 N
CCI RIS
CDES 8:RI,(1+)

Ph—NH—Ph

CM 2

CRN 17949-89-2
CMF Cl6 Sb
CCI CCS
CDES 7:OC-6-11



=> d his

(FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1 STRUCTURE UPLOADED
L2 QUE L1
L3 50 S L1 SAM

FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
S L1 AND POLYMER?

FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4 50 S L1

FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5 52 S L4
L6 4 S L5 AND POLYMER?
S L1 AND POLY?

FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7 50 S L1

FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8 52 S L7
L9 10 S L8 AND POLY?

FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10 0 S POLYBIPHENYLANILINE

FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11 1 S POLYBIPHENYLANILINE

FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
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FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13 0 S BIPHENYLANILINE

FILE 'REGISTRY' ENTERED AT 13:21:06 ON 01 OCT 2001

FILE 'REGISTRY' ENTERED AT 13:28:03 ON 01 OCT 2001
L14 STRUCTURE UPLOADED
L15 QUE L14
L16 0 S DL14 SAM
L17 3 S L14 SAM

FILE 'CAPLUS' ENTERED AT 13:29:53 ON 01 OCT 2001
S L14 AND POLYMER?

FILE 'REGISTRY' ENTERED AT 13:30:08 ON 01 OCT 2001

```
L18             3 S L14

     FILE 'CAPLUS' ENTERED AT 13:30:10 ON 01 OCT 2001
L19             4 S L18
L20             1 S L19 AND POLYMER?

=> log h

COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         6.39      96.84

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -0.59      -9.41

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:31:08 ON 01 OCT 2001
Connection closed by remote host

Trying 3106016892...Open

Welcome to STN International!  Enter x:x
LOGINID:ssspta1745sxt
PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:32:50 ON 01 OCT 2001
FILE 'CAPLUS' ENTERED AT 13:32:50 ON 01 OCT 2001
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         6.39      96.84

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -0.59      -9.41

=> fil caplus

COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         6.39      96.84

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FILE LAST UPDATED: 30 Sep 2001  (20010930/ED)

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CA SUBSCRIBER PRICE	0.00	-9.41

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FILE COVERS 1947 - 1 Oct 2001 VOL 135 ISS 15
FILE LAST UPDATED: 30 Sep 2001 (20010930/ED)

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=> s phenyl (3A) benzene

206514 PHENYL
307 PHENYLS

```
         206723 PHENYL
                  (PHENYL OR PHENYLS)
        1046860 PH
           7772 PHS
        1050429 PH
                  (PH OR PHS)
        1198685 PHENYL
                  (PHENYL OR PH)
         200799 BENZENE
          12232 BENZENES
         205859 BENZENE
                  (BENZENE OR BENZENES)
L21        1630 PHENYL (3A) BENZENE

=> s l21 and (N (2A) phenyl)

        2254232 N
         206514 PHENYL
            307 PHENYLS
         206723 PHENYL
                  (PHENYL OR PHENYLS)
        1046860 PH
           7772 PHS
        1050429 PH
                  (PH OR PHS)
        1198685 PHENYL
                  (PHENYL OR PH)
          32738 N (2A) PHENYL
L22          92 L21 AND (N (2A) PHENYL)

=> d his


     (FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

     FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1                STRUCTURE UPLOADED
L2                QUE L1
L3             50 S L1 SAM

     FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
                  S L1 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4             50 S L1

     FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5             52 S L4
L6              4 S L5 AND POLYMER?
                  S L1 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:08:41 ON 01 OCT 2001
L7             50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8             52 S L7
L9             10 S L8 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10             0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11             1 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12             0 S POLYMER? (5A) BIPHENYLANILINE
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     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13            0 S BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:21:06 ON 01 OCT 2001

     FILE 'REGISTRY' ENTERED AT 13:28:03 ON 01 OCT 2001
L14              STRUCTURE UPLOADED
L15              QUE L14
L16            0 S DL14 SAM
L17            3 S L14 SAM

     FILE 'CAPLUS' ENTERED AT 13:29:53 ON 01 OCT 2001
               S L14 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 13:30:08 ON 01 OCT 2001
L18            3 S L14

     FILE 'CAPLUS' ENTERED AT 13:30:10 ON 01 OCT 2001
L19            4 S L18
L20            1 S L19 AND POLYMER?

     FILE 'CAPLUS' ENTERED AT 13:32:56 ON 01 OCT 2001

     FILE 'CAPLUS' ENTERED AT 13:33:00 ON 01 OCT 2001
L21         1630 S PHENYL (3A) BENZENE
L22           92 S L21 AND (N (2A) PHENYL)

=> s l22 and ((N (2A) phenyl) (3A) benzene)

       2254232 N
        206514 PHENYL
           307 PHENYLS
        206723 PHENYL
                  (PHENYL OR PHENYLS)
       1046860 PH
          7772 PHS
       1050429 PH
                  (PH OR PHS)
       1198685 PHENYL
                  (PHENYL OR PH)
        200799 BENZENE
         12232 BENZENES
        205859 BENZENE
                  (BENZENE OR BENZENES)
            71 (N (2A) PHENYL) (3A) BENZENE
L23         54 L22 AND ((N (2A) PHENYL) (3A) BENZENE)

=> s l23 and poly?

       2909891 POLY?
L24         18 L23 AND POLY?

=> d 1-18 ibib abs ti hitstr


L24  ANSWER 1 OF 18  CAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:         2000:846530  CAPLUS
DOCUMENT NUMBER:          134:101411
TITLE:                    Molecular self-assembly of dendrimers, non-covalent
                          polymers and polypseudorotaxanes
AUTHOR(S):                Gibson, Harry W.; Hamilton, Lesley; Yamaguchi, Nori
CORPORATE SOURCE:         Department of Chemistry, Virginia Polytechnic
                          Institute and State University, Blacksburg, VA,
24061,
                          USA
```

SOURCE: Polym. Adv. Technol. (2000), 11(8-12), 791-797
CODEN: PADTE5; ISSN: 1042-7147
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The formation of pseudorotaxanes from dibenzo-24-crown-8 (DB24C8) and secondary aliph. ammonium ions was reported by Stoddart et al. Based on that mol. recognition motif several systems have been examd. as prototypical examples of (1) self-assembly of dendrimers via pseudorotaxane formation, (2) self-assembly of linear non-covalent **polymers** of the pseudorotaxane type and (3) control of properties of a **polymer** by pseudorotaxane formation. Attachment of a DB24C8 moiety to the "focal point" of first, second and third generation benzyl ether dendrons (Frechet type) allowed soln. phase self-assembly with a core unit consisting of 1,3,5-tris[p-(**N**-benzylammoniomethyl)**phenyl**]**benzene** to produce the corresponding dendritic pseudororotaxane structures, which are of nanometer scale. Ditopic hosts were prepd. by coupling DB24C8 units with difunctional linear species; ditopic guests were similarly constructed by linking two dibenzylammonium ion moieties. At high concns. in relatively non-polar solvents these complementary building blocks self-assembled into non-covalently bonded (pseudorotaxane) linear arrays, with high viscosity and fiber forming ability. Treatment of **polymethacrylates** bearing pendant DB24C8 units with dibenzylammonium PF6- resulted in changes in properties as a result of formation of side-chain pseudorotaxane units.

TI Molecular self-assembly of dendrimers, non-covalent **polymers** and **polypseudorotaxanes**

REFERENCE COUNT: 30
REFERENCE(S):
(4) Ashton, P; Angew Chem Int Ed Eng 1995, V34, P1865 CAPLUS
(5) Bosman, A; Chem Rev 1999, V99, P1665 CAPLUS
(8) Frechet, J; Comprehensive Polymer Science, 2nd suppl 1996, P71 CAPLUS
(11) Gibson, H; Prog Polym Sci 1994, V19, P843 CAPLUS
(12) Gong, C; Curr Opin Solid State Mater Sci 1997, V2, P647 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:257703 CAPLUS
DOCUMENT NUMBER: 133:17916
TITLE: Preparation of **poly**(biphenylene vinylene) type **polymers** by Ni-promoted **polycondensation** and their basic optical properties
AUTHOR(S): Yamamoto, Takakazu; Xu, Yuqing; Inoue, Tetsuji; Yamaguchi, Isao
CORPORATE SOURCE: Research Laboratory of Resources Utilization, Tokyo Institute of Technology, Yokohama, 226-8503, Japan
SOURCE: J. Polym. Sci., Part A: Polym. Chem. (2000), 38(9), 1493-1504
CODEN: JPACEC; ISSN: 0887-624X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ni(0)-complex promoted dehalogenation **polymn**. of 1,2-bis(4-bromophenyl)ethylene derivs. gave **poly**(p-biphenylene vinylene) type **polymers**, (-C6H2R21-CR2:CR2-C6H2R21-)n [P(R1,H) and P(H,R2)], having substituents (R1 = Me, Et, CHMe2, and n-C8H17, R2 = Me, Et, n-C6H13, **n**-C11H23, and **Ph**) at the **benzene** ring or vinylene group in 90-99% yields. The **polymers** were sol. in org. solvents such as CHCl3, DMF, and THF, and gave Mn of 2.4-5.3 .times. 103 in gel permeation chromatog. anal. The

absorption peak of the **polymers** appeared at a longer wavelength than that of the corresponding monomers by about 30 nm due to the expansion of the .pi.-conjugation system. The **polymers** were photoluminescent in solns. and in their films, emitting blue or green light. P(R1,H)s gave higher quantum yields (.PHI. = 0.35-0.51) than P(H,R2)s in CHCl3. P(H,R2)s showed a large Stokes shift (9600-13,500 cm-1) in their photoluminescence. Single-layer and multilayer light emitting diodes using vacuum deposited thin film of P(H,Ph) were prepd. **Polymers** with long alkyl substituents formed an ordered structure in the solid state as judged from their XRD (x-ray diffraction) patterns.

TI Preparation of **poly**(biphenylene vinylene) type **polymers** by Ni-promoted **polycondensation** and their basic optical properties

REFERENCE COUNT: 50

REFERENCE(S): (7) Bogdanovic, B; Justus Liebigs Ann Chem 1966, V699, P1 CAPLUS
(8) Brown, A; Chem Phys Lett 1992, V200, P46 CAPLUS
(9) Bunz, U; Chem Mater 1999, V11, P1416 CAPLUS
(10) Burroughes, J; Nature 1990, V347, P539 CAPLUS
(11) Chen, T; J Am Chem Soc 1995, V117, P233 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:721249 CAPLUS

DOCUMENT NUMBER: 132:78250

TITLE: Preparation and exchange interaction of DPPH-derived **polyradicals**

AUTHOR(S): Kozaki, Masatoshi; Nakamura, Shogo; Sato, Kazunobu; Takui, Takeji; Okada, Keiji

CORPORATE SOURCE: Department of Chemistry, Graduate School of Science, Osaka City University, Osaka, 558-8585, Japan

SOURCE: Mol. Cryst. Liq. Cryst. Sci. Technol., Sect. A (1999), 334, 131-138
CODEN: MCLCE9; ISSN: 1058-725X

PUBLISHER: Gordon & Breach Science Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of 1,1'-(benzene-1,3-diyl)bis(1-phenyl-2-picrylhydrazine) derivs. was prepd. and oxidized to generate the corresponding bis-DPPH diradicals.
No triplet species was obsd. for the parent compd. in the ESR. Incorporation of substituents in both the central **benzene** ring and the **N-Ph** groups resulted in the detection of triplet diradicals. Esp., the diradical with Me and t-Bu groups on the central **benzene** and the **N-Ph** rings, resp., was successfully purified and isolated at 0.degree. as a purple solid. Temp.-dependence of the intensity of the ESR signal showed that the isolated radical had a triplet ground state.

TI Preparation and exchange interaction of DPPH-derived **polyradicals**

REFERENCE COUNT: 12

REFERENCE(S): (1) Buu-Hoi, N; J Chem Soc 1952, P4346 CAPLUS
(4) Fang, S; J Am Chem Soc 1995, V117, P6727 CAPLUS
(6) Heidberg, J; J Am Chem Soc 1964, V86, P5173 CAPLUS
(7) Iwamura, H; Pure and Appl Chem 1996, V68, P243 CAPLUS
(8) Kanno, F; J Am Chem Soc 1993, V115, P847 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:558935 CAPLUS

DOCUMENT NUMBER: 132:208229

TITLE: Laterally attached SCLCPs designed to exhibit smectic

C mesophases
AUTHOR(S): Pugh, Coleen; Zhu, Pukun
CORPORATE SOURCE: Maurice Morton Institute of Polymer Science, The University of Akron, Akron, OH, 44325-3909, USA
SOURCE: Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (1999), 40(2), 534-535
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Based on the tendency of low molar mass liq. crystals composed of extended mesogens sym. disubstituted with long n-alkoxy substituents to exhibit smectic C mesophases, SCLCPs were designed, which possess laterally attached (vs. terminally attached) mesogens. The mesogens offer an ideal architecture for obtaining sC* mesophases. A three step synthetic approach is outlined for laterally attaching 1,4-bis[(3'-fluoro-4'-**n**-alkoxy-**phenyl**)ethynyl]**benzene** mesogens to a **polynorbornene** backbone to obtain the sC-n(i) phase sequence.
TI Laterally attached SCLCPs designed to exhibit smectic C mesophases
REFERENCE COUNT: 9
REFERENCE(S): (2) Komiya, Z; Macromolecules 1993, V26, P1393 CAPLUS
(4) Pugh, C; Liq Cryst 1991, V10, P229 CAPLUS
(5) Pugh, C; Macromolecules 1992, V25, P6593 CAPLUS
(6) Pugh, C; Macromolecules 1997, V30, P4520 CAPLUS
(7) Pugh, C; Macromolecules 1998, V31, P1779 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:544343 CAPLUS
TITLE: Laterally attached SCLCPs designed to exhibit smectic C mesophases.
AUTHOR(S): Pugh, Coleen; Zhu, Pukun
CORPORATE SOURCE: Maurice Morton Institute of Polymer Science, The University of Akron, Akron, 44325-3909, USA
SOURCE: Book of Abstracts, 218th ACS National Meeting, New Orleans, Aug. 22-26 (1999), POLY-470. American Chemical Society: Washington, D. C.
CODEN: 67ZJA5
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB Based on the tendency of low molar mass liq. crystals composed of extended mesogens sym. disubstituted with long n-alkoxy substituents to exhibit smectic C mesophases, we have proposed that SCLCPs with laterally attached (vs. Terminally attached) mesogens offer an ideal architecture for obtaining sC* mesophases. This paper will describe a three step approach for laterally attaching 1,4-bis[(3'-fluoro-4'-**n**-alkoxy-**phenyl**)ethynyl]**benzene** mesogens to a **polynorbornene** backbone in order to obtain the sC-n(i) phase sequence.
TI Laterally attached SCLCPs designed to exhibit smectic C mesophases.

L24 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:754828 CAPLUS
DOCUMENT NUMBER: 130:81232
TITLE: **Poly**[4-vinyl, **N**-(**N**'-**phenyl**) **benzene** sulfonamide] as a new and selective catalyst for bromination of various aromatic compounds
AUTHOR(S): Khazaei, Ardeshir; Hosseini, Hassan; Sadri, Minoo
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Bu-Ali Sina University, Hamadan, Iran
SOURCE: Orient. J. Chem. (1998), 14(2), 267-276

CODEN: OJCHEG; ISSN: 0970-020X
PUBLISHER: Oriental Scientific Publishing Co.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Poly**(4-vinyl-N'-phenylbenzenesulfonylhydrazine) was prepd. for use as catalyst for bromination of arom. rings, e.g., benzene, toluene, iso-propylbenzene and bromobenzene. The **polymer** was prepd. by radical **polymn**. of 4-CH2:CHC6H4SO2NHNHPh with azobisisobutyronitrile as initiator. The hydrazide was prepd. from com. 4-vinylbenzenesulfonic acid sodium salt, PCl5 and phenylhydrazine. The **polymer** can be used in equimolar amts. as a **polymeric** catalyst, and catalyzes a wide range of bromination reactions. Recovered **polymer** can be reused. Bromination of arom. rings takes place without brominating the alkyl substituent on the arom. ring.

TI **Poly**[4-vinyl, **N**-(**N'-phenyl**) **benzene** sulfonamide] as a new and selective catalyst for bromination of various aromatic compounds

REFERENCE COUNT: 19
REFERENCE(S):
(1) Arshady, R; React Poly 1983, V1, P159 CAPLUS
(3) Bonds, W; J Am Chem Soc 1975, V97, P2128 CAPLUS
(4) Capillon, J; Polym Bull 1985, V13, P185 CAPLUS
(5) Challa, G; Mol Catal 1983, V21, P1 CAPLUS
(8) Guyot, A; Progr Polym Sci 1982, V8, P277 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:706385 CAPLUS
DOCUMENT NUMBER: 130:67012
TITLE: Preparation of a Redox-Gradient Dendrimer. **Polyamines** Designed for One-Way Electron Transfer and Charge Capture
AUTHOR(S): Selby, Trent D.; Blackstock, Silas C.
CORPORATE SOURCE: Department of Chemistry, The University of Alabama, Tuscaloosa, AL, 35487-0336, USA
SOURCE: J. Am. Chem. Soc. (1998), 120(46), 12155-12156
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A redox-active **polyarylamine** dendrimer (I) which possesses a radial redox-gradient was prepd. via sequential Ullmann reactions and the electron transport mechanisms were studied. The dendrimer has a benzene core, interior p-phenylenediamine (PD) groups, perimeter diarylamino groups, and nominal C3 symmetry with nine distinct, meta-linked redox functions. Electrochem. oxidn. of dendrimer I by cyclic voltammetry (CV) reveals multiple oxidns.; the first three oxidn. peaks are chem. reversible and are assigned as one-, two- and three-electron processes with oxidn. potential E1.degree.' 0.48, E2.degree.' .apprx. E3.degree.' 0.63, and E4.degree.' .apprx. E5.degree.' .apprx. E6.degree.' 0.88 V vs. SCE in CH2Cl2. The fourth, fifth, and sixth oxidns. of I at 0.88 V are assigned as electron loss from remote peripheral AA groups. Chem. oxidn. of I with NOPF6 provides isolable 1+, 12+, and 13+ PF6 salts in high yield. The redox gradient in dendrimer I is about 0.2 V and this potential gradient should provide a conduit for electron-hole transfer from surface to core and simultaneously impart a barrier to the reverse process to render a degree of electronic protection against the reverse charge transport. The intermol. PD neutral/cation electron-exchange rate for dendrimer I is slowed by a factor of 103-104 relative to model (unprotected) PD neutral/cation couples.

TI Preparation of a Redox-Gradient Dendrimer. **Polyamines** Designed for One-Way Electron Transfer and Charge Capture

REFERENCE COUNT: 47

REFERENCE(S):
(2) Bruce, C; J Chem Phys 1956, V24, P473 CAPLUS
(3) Bruce, C; J Chem Phys 1956, V24, P473 CAPLUS
(4) Bruce, C; J Chem Phys 1956, V24, P473 CAPLUS
(5) Buu-Hoi, N; J Chem Soc 1952, P4346 CAPLUS
(6) Buu-Hoi, N; J Chem Soc 1952, P4346 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:253256 CAPLUS

DOCUMENT NUMBER: 128:230804

TITLE: Synthesis of Novel **Polysiloxanes** Containing Charge Transporting and Second-Order Nonlinear Optical Functionalities with Atom Economical Constructs

AUTHOR(S): Belfield, Kevin D.; Chinna, Chandrasekhar; Najjar, Ousama

CORPORATE SOURCE: Department of Chemistry, University of Detroit Mercy, Detroit, MI, 48219, USA

SOURCE: Macromolecules (1998), 31(9), 2918-2924
CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Novel, highly functionalized **polysiloxanes** were prepd. in which each repeat unit bears, on av., one charge transporting and one to two second-order nonlinear optical chromophores. Covalent attachment of charge-transporting carbazole or diphenylamine derivs. was realized through efficient Pt-catalyzed hydrosilylation. **Poly**(methylsiloxane) was reacted with 9-(2-propenyl)carbazole or (**N-phenyl-N**-2-propenylamino)**benzene**, affording **poly**[methyl-3-(9-carbazolyl)propylsiloxane] and **poly**[methyl-3-(N,N-diphenylamino)propylsiloxane], resp. Rather remarkable regiospecific bromination of the two arylamine-contg. siloxane **polymers** was achieved using benzyltrimethylammonium chlorobromate, resulting in the formation of **poly**[methyl-3-(N-(3,6-dibromocarbazolyl))propylsiloxane] and **poly**[methyl-3-(N,N-bis(4-bromophenyl)amino)propylsiloxane]. Pd-catalyzed Heck-type coupling of the arylbromide-bearing **polysiloxanes** with either vinylbenzenephosphonic acid di-Et ester or 4-nitrostyrene afforded stilbene-contg. **polymers** bearing phosphonate ester or nitro moieties as electron-withdrawing functionalities, resp. These fully functionalized **polymers** were readily sol. in several common org. solvents.

TI Synthesis of Novel **Polysiloxanes** Containing Charge Transporting and Second-Order Nonlinear Optical Functionalities with Atom Economical Constructs

L24 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:261377 CAPLUS

DOCUMENT NUMBER: 126:317742

TITLE: Tris(2,4-pentanedionato)vanadium-catalyzed cyclotrimerization and **polymerization** of 4-(N,N-dimethylamino)phenylethyne: x-ray structure of 1,2,4-tris[4-(**N,N**-dimethylamino)**phenyl**]**benzene**

AUTHOR(S): Rodriguez, J. Gonzalo; Martin-Villamil, Rosa; Fonseca, Isabel

CORPORATE SOURCE: Departamento de Quimica Organica, Cl, Facultad de Ciencias, Universidad Autonoma, Madrid, 28049, Spain

SOURCE: J. Chem. Soc., Perkin Trans. 1 (1997), (6), 945-948
CODEN: JCPRB4; ISSN: 0300-922X

PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Tris(pentane-2,4-dionato)vanadium-catalyzed **polymn**. of 4-(N,N-dimethylamino)phenylethyne gave a **polyene** with .pi.-conjugated donor substituents. Similarly, cyclotrimerization of the acetylene deriv. gave a mixt. of 1,2,4- and 1,3,5-tris[4-(**N**,**N**-dimethylamino)**phenyl**]**benzene** in variable yield, depending on the reaction conditions employed. The mol. structure of the main cyclotrimerization product, i.e., the 1,2,4- isomer, was detd. by x-ray diffraction methods.
TI Tris(2,4-pentanedionato)vanadium-catalyzed cyclotrimerization and **polymerization** of 4-(N,N-dimethylamino)phenylethyne: x-ray structure of 1,2,4-tris[4-(**N**,**N**-dimethylamino)**phenyl**]**benzene**

L24 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:195327 CAPLUS
DOCUMENT NUMBER: 126:171190
TITLE: Isolable **polyradical** cations of **polyphenylenediamines** with populated high-spin states
AUTHOR(S): Stickley, Kurt R.; Selby, Trent D.; Blackstock, Silas C.
CORPORATE SOURCE: Department of Chemistry, University of Alabama, Tuscaloosa, AL, 35487-0336, USA
SOURCE: J. Org. Chem. (1997), 62(3), 448-449
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 126:171190
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The prepn. and oxidn. of 1,3,5-tris[**N**-[4-(diphenylamino)**phenyl**]phenylamino]**benzenes** [I; R = H (II), OMe (III)] are reported. Cyclic voltammetry of each substrate shows 6 chem. reversible oxidns. at 298 K. The corresponding formal oxidn. potentials (E.degree.' in CH2Cl2, 0.1 M Bu4NClO4) are (n,+) 0.59, (+,2+) 0.72, (2+,3+) 0.79, (3+,4+) 1.15, (4+,5+) 1.24, (5+,6+) 1.33 V vs. SCE for II and (n,+) 0.41, (+,2+) 0.54, (2+,3+) 0.61, (3+,4+) 0.97, (4+,5+) 1.01, (5+,6+) 1.08 V vs. SCE for III. Dications II2+ and III2+ in frozen PrCN show triplet-state ESR signals with |D|/hc values 0.0035 and 0.0026 cm-1, resp. The trications II3+ and III3+ show 5-line ESR spectra in frozen media, which are assigned to the corresponding quartet species. The |D|/hc splittings for II3+ and III3+ are 0.0026 and 0.0018 cm-1, resp. Curie-Weiss plots over the limited temp. range of 90-120 K are linear for both trications. Soln. susceptibility measurements by 1H NMR at 298.5 K show that these di- and trications are mixts. of low- and high-spin states with the latter states in excess. Lifetimes of the mono-, di-, and trications of II and III in soln. are days at 298 K, and the first 3 cationic states of III are isolably stable as their PF6 salts. These results demonstrate the robust stability of meta-linked p-phenylenediamine triplet and quartet **polyradical** cations.
TI Isolable **polyradical** cations of **polyphenylenediamines** with populated high-spin states

L24 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:531006 CAPLUS
DOCUMENT NUMBER: 123:158615
TITLE: One or two-dimensional ferro- and ferrimagnetic ordering formed by manganese(II) complexes with .pi.-conjugated **polynitroxide** radicals
AUTHOR(S): Inoue, Katsuya; Iwamura, Hiizu
CORPORATE SOURCE: Dep. of Chemistry, Kitasato Univ., Kanagawa, 228, Japan
SOURCE: Synth. Met. (1995), 71(1-3), 1793-4
CODEN: SYMEDZ; ISSN: 0379-6779
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The crystal structure and magnetic properties of two novel adducts of Mn(II) and bis- and trinitroxide radicals Mn(hfac)2(BisNO) (I) and [Mn(hfac)2]3(TriNO)2 ,(II), where hfac = hexafluoroacetylacetonate and BisNO = 1,3-bis(N-tert-butyl-N-oxyamino)benzene, TriNO = 1,3,5-tris[p-(N-tert-butyl-**N**-oxyamino)**phenyl**] **benzene**, are reported. I is monoclinic, space group P21/n with a 9.212(3), b 16.620(3), c 20.088(2) .ANG., .beta. 98.46(1).degree., and Z = 4. The BisNO mols. and Mn ions make a 1-dimensional **polymeric** chain. I behaves as a metamagnet, with a hysteretic magnetization curve below Tc = 5.5 K. II is rhombohedral (hexagonal axes), space group R.hivin.3 a 28.462(7), c 18.40(1) .ANG., and Z = 4. Six TriNO mols. and six Mn ions make an expanded hexagon from which an extend honeycomb network is constructed by sharing its edges. II behaves as a magnet, with a spontaneous magnetization below Tc = 3.4 K. Structures and magnetic properties for I and II are discussed.

TI One or two-dimensional ferro- and ferrimagnetic ordering formed by manganese(II) complexes with .pi.-conjugated **polynitroxide** radicals

L24 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1991:256810 CAPLUS
DOCUMENT NUMBER: 114:256810
TITLE: Molecular design for better charge transporting organic materials. (II). Hole drift mobility and chemical structure of arylamine derivatives
AUTHOR(S): Tanaka, Hiroaki; Yamaguchi, Yasuhiro; Yokoyama, Masaaki
CORPORATE SOURCE: Fac. Eng., Osaka Univ., Suita, 565, Japan
SOURCE: Denshi Shashin Gakkaishi (1990), 29(4), 366-72
CODEN: DSHGDD; ISSN: 0387-916X
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Arylamine derivs. contg. only **N-Ph** units, which can be taken as a structural min. unit for hole carrier, were synthesized, and their hole-drift mobilities in **polymer** dispersions were studied in relation to their chem. structure. The results validitated the previously proposed concept for developing better charge-transporting carriers and the dependence of their mobility on the chem. structure was thus obsd. for the first time, is related to the position of the **N -Ph** substituent on **benzene**. The dependence was interpreted by the more concrete concept of **polyfunctionality** and intramol.-mobility based on MO calcns. Among the compds. investigated, a new arylamine deriv., N,N,N',N'-tetrakis (3-methylphenyl)-m-phenylenediamine (m-PDA), showed a high-hole mobility.

TI Molecular design for better charge transporting organic materials. (II). Hole drift mobility and chemical structure of arylamine derivatives

L24 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1990:93291 CAPLUS
DOCUMENT NUMBER: 112:93291
TITLE: An electron spin resonance study of the particles produced in the pyrolysis of perfluoro

polymers

AUTHOR(S): Pryor, William A.; Nuggehalli, Shamala K.; Scherer, Kirby V., Jr.; Church, Daniel F.

CORPORATE SOURCE: Biodyn. Inst., Louisiana State Univ., Baton Rouge, LA, 70803, USA

SOURCE: Chem. Res. Toxicol. (1990), 3(1), 2-7
CODEN: CRTOEC; ISSN: 0893-228X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB ESR anal. at room temp. of the particles produced during the aerobic pyrolysis of perfluoro **polymers** shows the presence of end-chain peroxyl radicals. These radicals, which would normally have lifetimes of several seconds at most, are stabilized by being immobilized in the particles and decay at a rate of .apprx.20%/day. Normally, radicals with this stability would not be expected to be reactive; however, these peroxyl radicals react with 3-chloropropene, with iodine in benzene, with Me linoleate in MeOH, and with soy phosphatidylcholine in aq. liposomes. Also, stable radicals of this sort would not be expected to give spin adducts; however, when the particles are suspended in a **benzene** soln. contg. .alpha.-**phenyl-N**-tert-butylnitrone (PBN), they react to give the same series of spin adducts that are detected when the unfiltered smoke from the oxidative pyrolysis of perfluoro **polymers** is bubbled directly into PBN solns. This appears to be the 1st report of the reaction of radicals entrapped in a solid with a spin trap. The nitroxide species produced by the PBN-particle reaction include a fluorine atom spin adduct, an oxy radical adduct, and benzoyl tert-Bu nitroxide (PBNOx), the oxidn. product of the spin trap; all of these appear to arise from reaction of the particle-bound peroxyl radicals with the spin trap. Because the particles are in the highly respirable range (down to 0.01 .mu.m), these entrapped peroxyl radicals may be carried deep within the lung when fumes from PFP pyrolysis are inhaled and would be expected to place an oxidative burden on the lung. Thus, these results support the hypothesis that oxidative reactions initiated by radicals may contribute to the toxicity of smoke (i.e., the oxidative pyrolysis products) of perfluoro **polymers**.

TI An electron spin resonance study of the particles produced in the pyrolysis of perfluoro **polymers**

L24 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1989:65723 CAPLUS

DOCUMENT NUMBER: 110:65723

TITLE: Bath for electrodepositing bright tin coatings

INVENTOR(S): Szczepaniak, Stanislaw

PATENT ASSIGNEE(S): Centralny Zwiazku Spoldzielni Inwalidow, Biuro Studiow i Projektow, Kielce, Pol.

SOURCE: Pol., 9 pp. Abstracted and indexed from the unexamined application.
CODEN: POXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 141189	B1	19870731	PL 1984-248413	19840627

GI For diagram(s), see printed CA Issue.

AB The bath, for use in stationary and rotary devices, contains SnSO4 10-50, H2SO4 50-200, nonionic compd. R1R2Ar(OC2H4)nOH (where R1 and R2 are H, alkyl or alkoxy groups of 1-10 C atoms, Ar is **benzene**, naphthalene or di-**Ph** radical, and **n** = 10-50) 2-20,

unsatd. hydrophilic **polyester** resin [OCCH=CHCO(OC2H4)nO]m (n = 2-20, m = 4-40) 0.05-5, and quaternary carbonyl compd. I (where R1 and R2 are independently H, alkyl or alkoxy groups of 1-4 C atoms, amide, amine, carboxyl, nitro, nitrile or sulfone groups or halogen atom, R3 is H or halogen atom, alkyl or alkoxy group (1-4 C atoms), X is Cl-, Br-, I-, OH-, or CH3SO4- and N is a ternary heterocyclic compd. contg. ternary N atom and pyridine, quinoline, isoquinoline or acridine ring 0.5-5 g/dm3. The bath gives bright, plastic, and compact coatings at high deposition rates.

TI Bath for electrodepositing bright tin coatings

L24 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1985:479398 CAPLUS
DOCUMENT NUMBER: 103:79398
TITLE: Photographic dye image formation
PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60019140	A2	19850131	JP 1983-127415	19830713
JP 05014894	B4	19930226		

AB A dye image is formed on a Ag halide color photog. photosensitive material which comprises a support and .gtoreq.1 Ag halide emulsion layer contg. Ag halide grains substantially composed of AgCl by way of color developing the imagewise exposed material with a developer (pH 9.5-11.0) which contains a p-phenylenediamine-type color developer and a **polyhydroxybenzene**-type preservative represented by the general formula (CO2M)nPh(OH)m [M = H, alkali metal; m = 2, 3; **n** = 1, 2; **Ph** = **benzene** ring). The developer effectively suppresses color stains and lowering in color d. often resulting from long-time running processing of AgCl photog. films. Thus, a **poly** (ethylene terephthalate) support was coated with a green-sensitive monodispersed AgCl emulsion (av. grain size 0.45 .mu.m) layer contg. a magenta coupler and a protective layer to form a photog. film. The film was stepwise-exposed, color-developed at 33.degree. for 70 s with a developer composed of ethylene glycol 8, benzyl alc. 6 mL, K2SO3 20, 4-amino-3-methyl-N-ethyl-N-.beta.-ethanesulfonamidoethylaniline sulfate 4.5, adenine 0.018, K2CO3 27.0, NaCl 1.0, 4,4'-diaminostilbene whitening agent 1.5, and 1,4-dihydroxy-5-carboxylbenzene 2.0 g/L (pH 10.4), and bleach-fixed to give a magenta image in which Dmax and Dmin (stain level) were kept substantially const. even when the film was developed by a developer stored for 10 days before use.

TI Photographic dye image formation

L24 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1984:553384 CAPLUS
DOCUMENT NUMBER: 101:153384
TITLE: Surface-modified **polyester** compns.
PATENT ASSIGNEE(S): Teijin Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 59066449	A2	19840414	JP 1982-176098	19821008

AB **Polyester** compns. for soil-repellent fibers and films contain 0.1-5% F-contg. metal sulfonates (RSO3)pM or [(RZ)nZ1SO3]pM (R = C4-27 perfluoroalkyl; Z = S, O; Z1 = **benzene**, naphthalene, biphenyl, di-**Ph** ether residue; **n** = 1-2; p = 1-4; M = p-valent metal). Thus, a 99:1 mixt. of **poly**(ethylene terephthalate) and Na perfluorononenyloxybenzenesulfonate [77110-17-9] was melt-spun at 295.degree. and drawn to give soil-repellent fibers with tenacity 4.5 g/denier and elongation 35%.

TI Surface-modified **polyester** compns.

L24 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1969:471710 CAPLUS
DOCUMENT NUMBER: 71:71710
TITLE: **Polyisoprene** with high cis-1,4 content
INVENTOR(S): Nishida, Takuji; Itoi, Kazuo
PATENT ASSIGNEE(S): Kurashiki Rayon Co., Ltd.
SOURCE: Ger., Offen., 24 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1804490		19690619		
PRIORITY APPLN. INFO.:			JP	19671024
			JP	19671205

AB The title **polymers** are prepd. by **polymg**. isoprene (I) in inert hydrocarbon solvents using catalysts contg. organoaluminum compds. and components prepd. by treating organtin hydrides with TiCl4 in inert hydrocarbon solvents using SnH group-Ti mole ratios of 0.5-6.0, followed by the removal of .gtoreq.25% of the hydrocarbon-sol. material from the reaction mixt. Al-Ti mole ratios of 0.01-0.5 are used. Thus, a mixt. of 30 ml. n-hexane (II), 0.87 g. Bu3SnH, and 0.57 g. TiCl4 were held 1 hr. at 29.degree. under N, centrifuged 10 min. at 3000 rpm., and the supernatant liq. removed. The II-insol. fractions were washed 4 times by centrifugation with 30 ml. II, mixed with an addnl. 30 ml. II, 0.6 millimoles Et3Al in n-heptane, and 7.20 g. I. The mixt. was shaken 24 hrs. at 50.degree.. The **polymer** was immersed overnight in 100 ml. 4:1 **benzene**-MeOH contg. **N-phenyl** -.beta.-naphthylamine, and pptd. with 200 ml. MeOH, giving a rubbery **polymer**. The yield was 84.2% after swelling with benzene and freeze-drying. The **polymer** contained 11.2% wt. gel and 95.4% cis-1,4 units. **Polymn**. without the addn. of Et3Al or with the removal of <25% of the hexane-sol. fraction of the Bu3SnH-TiCl4 reaction product gave varying yields of a resinous **polymer**. Other SnH compds. used were Et3SnH, Bu2SnH2, Ph3SnH, and Pr3SnH, and other Al compds. used were Et2AlCl and iso-Bu3Al.

TI **Polyisoprene** with high cis-1,4 content

L24 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1966:489712 CAPLUS
DOCUMENT NUMBER: 65:89712
ORIGINAL REFERENCE NO.: 65:16753a-b
TITLE: Oxidation products of **N-phenyl** -1-naphthylamine and effect of alkylation on oxidation inhibition
AUTHOR(S): Peeler, R. L.
CORPORATE SOURCE: California Res. Corp., Richmond
SOURCE: Am. Chem. Soc., Div. Petrol. Chem., Preprints (1965), 10(2), D119-D125

DOCUMENT TYPE: Journal
LANGUAGE: English
AB The lubricating oil insol. oxidn. product of **N-phenyl**-1-naphthylamine was prepd. by a variety of oxidizing agents in neutral media. It was identified by elemental and spectrometric analysis as a **polymeric** 1,4 naphthylenediamine deriv. Ring alkylation affected both the character of the oxidn. product and effectiveness as an oxidn. inhibitor. Dornte O absorption measurements were used to measure inhibitor effectiveness and sunlight exposure to evaluate resistance to sludge formation. Substitution of long alkyl groups on the **benzene** ring of **N-phenyl**-1-naphthylamine gave the best combination of oxidn. inhibition and resistance to sludging.
TI Oxidation products of **N-phenyl**-1-naphthylamine and effect of alkylation on oxidation inhibition

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	52.53	149.70

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CA SUBSCRIBER PRICE	-10.58	-19.99

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Welcome to STN International! Enter x:x
LOGINID:ssspta1745sxt
PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
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FILE 'CAPLUS' ENTERED AT 13:35:26 ON 01 OCT 2001
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FULL ESTIMATED COST	52.86	150.03

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(FILE 'HOME' ENTERED AT 12:56:18 ON 01 OCT 2001)

FILE 'REGISTRY' ENTERED AT 12:56:49 ON 01 OCT 2001
L1 STRUCTURE UPLOADED
L2 QUE L1
L3 50 S L1 SAM

FILE 'CAPLUS' ENTERED AT 12:59:32 ON 01 OCT 2001
S L1 AND POLYMER?

FILE 'REGISTRY' ENTERED AT 12:59:40 ON 01 OCT 2001
L4 50 S L1

FILE 'CAPLUS' ENTERED AT 12:59:41 ON 01 OCT 2001
L5 52 S L4

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L6             4 S L5 AND POLYMER?
                 S L1 AND POLY?

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L7            50 S L1

     FILE 'CAPLUS' ENTERED AT 13:08:43 ON 01 OCT 2001
L8            52 S L7
L9            10 S L8 AND POLY?

     FILE 'REGISTRY' ENTERED AT 13:15:24 ON 01 OCT 2001
L10            0 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:15:58 ON 01 OCT 2001
L11            1 S POLYBIPHENYLANILINE

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 01 OCT 2001
L12            0 S POLYMER? (5A) BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 OCT 2001
L13            0 S BIPHENYLANILINE

     FILE 'REGISTRY' ENTERED AT 13:21:06 ON 01 OCT 2001

     FILE 'REGISTRY' ENTERED AT 13:28:03 ON 01 OCT 2001
L14              STRUCTURE UPLOADED
L15              QUE L14
L16            0 S DL14 SAM
L17            3 S L14 SAM

     FILE 'CAPLUS' ENTERED AT 13:29:53 ON 01 OCT 2001
                 S L14 AND POLYMER?

     FILE 'REGISTRY' ENTERED AT 13:30:08 ON 01 OCT 2001
L18            3 S L14

     FILE 'CAPLUS' ENTERED AT 13:30:10 ON 01 OCT 2001
L19            4 S L18
L20            1 S L19 AND POLYMER?

     FILE 'CAPLUS' ENTERED AT 13:32:56 ON 01 OCT 2001

     FILE 'CAPLUS' ENTERED AT 13:33:00 ON 01 OCT 2001
L21         1630 S PHENYL (3A) BENZENE
L22           92 S L21 AND (N (2A) PHENYL)
L23           54 S L22 AND ((N (2A) PHENYL) (3A) BENZENE)
L24           18 S L23 AND POLY?

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                                                 ENTRY    SESSION
FULL ESTIMATED COST                              52.86     150.03

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                 ENTRY    SESSION
CA SUBSCRIBER PRICE                             -10.58     -19.99

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